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UNIVERSITY EXTENSION IN ENGLAND.*

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As the honor of delivering the opening address of this series of the University Extension courses provided by the University of California for the City of San Francisco has been entrusted to me, I have selected as my topic University Extension in England. It was my fortune to be an Oxford University Extension lecturer from 1890 to 1894, and I can therefore claim to speak with the authority of some experience. But at the same time I have no desire to go into the history or statistics of so well-worn a subject, preferring rather to deal in a purely descriptive fashion with the Extension movement. I shall draw on my personal reminiscences instead of going into elaborate detail from printed sources, and I hope to supplement the published accounts of English University Extension work by dwelling on some of the lesser known features of it.

The idea of University Extension was first propounded in England, and the methods tried there have since been imitated, with modifications, in France, Germany, and the United States. Many universities in America have started courses of University Extension lectures, notably the University of Chicago, which has from its foundation made University Extension an important department of its work;

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but it would appear that upon the whole the Philadelphia Society of Extension, which is not officially connected with any institution of higher education, has done the most successful work. Conditions in the United States have greatly modified the idea of Extension work in this country, and it may therefore be of interest to describe the system in its development in the home of its birth. This is not done with the intention of arguing that the English system ought to be more closely followed in America, for, as a matter of fact, the slavish imitation of European methods in American educational institutions seems to me always to have resulted in harm. The imitation of the English system sometimes recommended in American college education, the imitation of the German system so largely used in graduate work, and the imitations of the systems of other countries in other respects, seem to me fraught with very considerable danger; and in my lecture this evening, in which I will try to describe the way in which the University Extension system works in England, I desire it to be understood that I speak without recommending any base or servile imitation, but with the idea in my mind that possibly some features of the English system, not at present understood, might be considered worthy of study.

It has to be borne in mind that higher education in England forms no part of the work of the State. The Universities of Oxford and Cambridge, the two great centers of the higher education, are entirely independent of the State. They own their own property. They are formed of a component body of colleges each of which owns its own property; and they confer degrees under their own regulations. It is their business to supply higher education to those young men who care to take it; it is their business, and not the business of the State. At the same time the State is perfectly free to interfere with these two great English educational trusts, and accordingly parliamentary commissions have been appointed on more than one occasion which have, by the authority entrusted to them by Parliament,

caused uses to be made of the property of the colleges and of the Universities of Oxford and Cambridge which the pious founders who bequeathed property to those universities would have been shocked to hear of. The clerical profession of the early educational founders in England, their desire to encourage true religion in its teaching in Oxford and Cambridge, would have been shocked by the apportionment of large portions of the funds of colleges and universities to such purely scientific education as is now encouraged, particularly in the University of Cambridge. It has been considered wise that the wishes of the pious founder should be interferred with, and the legislature has interfered with the wishes of the pious founder accordingly. But the legislature has not dared to confiscate the property or to undertake the direction of the work of Oxford and Cambridge; and it is to be remembered in what follows that these two great universities, which have been foremost in the work of University Extension, have not been forced into that by any effort on the part of the State, and that they have undertaken that work in the belief that by doing so they would increase their usefulness. At the same time, there is not the slightest doubt that the leading men at both universities have largely encouraged University Extension because they have feared that the growth of the power of democracy in England might lead to other encroachments than those that have hitherto been attempted; and undoubtedly one reason of the countenance given to University Extension has been the belief on the part of the authorities of the two great universities that they might thereby extend a knowledge of their work to the people of England.

The two great English universities, not being State institutions, have undertaken the work of University Extension as a piece of benevolence outside their regular sphere. They have not been forced thereto. Since they have undertaken it with the recognition that it is outside the work for which their funds are intended, they have undertaken it on business principles, and have tried to make it

pay for itself. In this respect the conditions differ from those of the work in this country, in which university education is a part of the functions of the State.

The two great English universities in starting University Extension, started it on business principles with the idea of making it pay for itself. No profits are handed over from the university syndicate, as it is called in Cambridge—delegacy, as it is called in Oxford—no profits are handed over to the universities. On the other hand, the universities spend little or no money in the work of University Extension; University Extension pays for itself.

The first step of the two universities was to appoint, in Cambridge a syndicate, in Oxford a delegacy, to take charge of the work of University Extension. A certain number of professors, tutors, heads of colleges, eminent university men, were formed into a body called in Cambridge the University Extension Syndicate, in Oxford the University Extension Delegacy, which body has a paid secretary who directs the business of what might be called the Central Bureau. I propose first to speak of this central organization, then to go on and speak of the staff of lecturers and the way in which they are organized, then to discuss the formation of the different centers in England which employ University Extension lecturers, and lastly to deal with the sort of education which results.

First, then, in regard to the central organization. The central organization consists of the body of professors, tutors, heads of colleges, and eminent university men, whose business it is to meet as a board and listen to the report of their secretary and to give their most valuable advice in the selection of lecturers. But the real head of University Extension, both in Oxford and Cambridge, is the paid secretary, and in both universities there have been some very distinguished men who have filled the position of paid secretary to the University Extension.

The first Secretary of University Extension at Oxford was Mr. Arthur Acland, who afterwards went into

Parliament, and for several years was Vice-President of the Committee of the Privy Council of Education, or practically Minister of Education in England. Mr. Arthur Acland was a man who at Oxford had gone into what may be called the business side of education. He was Steward of Christ Church, and in that place showed considerable business ability. He was never a teacher, tutor, or professor. Added to his duties as Steward of Christ Church, which meant the collection and expenditure of the revenues of the college, he was the first Secretary of University Extension at Oxford. Arthur Acland was not in any way, or in any sense of the word, a great scholar. He never pretended to be. But he was a strong believer in popular education. When the history of popular education in England comes to be written the name of Arthur Acland will stand very high, because of the work he did both as Minister of Education, after he went into Parliament, and as the first Secretary of University Extension in Oxford.

After Mr. Acland came Mr. Michael Sadler. Mr. Sadler was a grandson of the famous opponent of Lord Macaulay, and succeeded Mr. Arthur Acland both as Steward of Christ Church and Secretary of University Extension. He was one of the very ablest men of his time at Oxford. He did not go into the work of teaching, but took up the work from Mr. Arthur Acland's hands and proved himself very proficient in the work of organizing the University Extension and building up its centers. It was Michael Sadler who really built up the great Extension centers. Mr. Sadler is well known in some of the Eastern States. He has visited America on several occasions and lectured at Philadelphia and, I believe, at Chicago. The successor of Mr. Sadler is Mr. Marriott, the present secretary, who was for many years a most successful lecturer. In Cambridge the man who made University Extension was Dr. George Forrest Browne, who is now Bishop of Bristol, and who for more than twenty years managed Cambridge Extension. He was in entire sympathy with Mr. Acland and Mr. Sadler, and his term of

office covered nearly the whole of their period of office at Oxford.

These are the men who really made University Extension in England. There may be one or two others, like Dr. Roberts, of the London Society for University Extension, who should be mentioned in this connection, but the three who have been named were by the delegates at Oxford and the syndics in Cambridge put in charge of the central offices and developed the system. It was their business to keep a list of the University Extension lecturers, to grade them, to make out lists of their subjects, to make out circulars describing the subjects on which they were ready to lecture. Next it is the business of the secretary to make out his yearly report of University Extension to his syndicate or delegacy, as the case may be. Next he has to keep in touch with the different centers, so that when any center in any part of the kingdom writes to him and says "we want a university lecturer," it is his business to know whom to advise to be sent. If they say they want a university lecturer on biology or art or botany or whatever it may be, it is the secretary's business to advise that center who would be a good man. It is his business to go down and look over the center itself and study its needs so that he may send them exactly the right man. Very often a university lecturer may be admirably suited to an audience in a fashionable watering place but unsuited to lecture to workingmen. It is the business of the secretary to understand the needs of the various centers, so as to send them the right man, and he must keep in touch with them. He must listen to their complaints when they make complaints and see that each center is satisfied. He further has the whole handling of the financial business, getting the checks that are sent in to pay for extension lectures by centers. He has the general central work of administration. His most important business is the drawing up of the list of lecturers, the forming of that list of lecturers and the assigning as far as possible of the right lecturer to the right

center. This is a more difficult matter than might be expected, because the number of centers runs into hundreds, and naturally all the centers want a very popular lecturer at the same time, and it is the business of the secretary to try to furnish popular lecturers in proper doses and to try to make the different centers satisfied with new young men, perhaps giving lectures for the first time. No center likes to have a new young man trying his "apprentice hand" on them, but the new men have to try their "apprentice hands" somewhere; and it is the business of the University Extension Secretary for Oxford to see that the young man gets a fair chance, and that the center that has had a young man to bring in shall next time have a popular lecturer to compensate them. These matters of management require exceeding skill and knowledge of men and in the handling of them; and Mr. Sadler's great title to distinction is in his understanding and skill in handing around his lecturers and in selecting and apportioning them. I think it may be said with justice that the success of University Extension in England has depended almost entirely, not upon the patience of the audiences, not upon the brilliancy of the lecturers, but upon the skill of the men that have been named as the most conspicuous and successful of the University Extension secretaries.

In the work of selecting these lecturers the secretary has largely to rely upon his own acumen. The young man, or middle aged man who wants to deliver University Extension lectures and get some money thereby, applies to the central office; and the central office has to consider whether to encourage him in his application or not. If he seems the right sort of a man for an Extension lecturer he is asked to lecture, and he is tried in one or two audiences. There are two audiences in particular in Oxford which exist largely for the purpose of trying ambitious lecturers upon. One is the Young Men's Christian Association, which has an audience of considerable patience, and the other a very large and important Girls' Normal School, also an exceedingly

patient audience; and the poor University Extension lecturer at Oxford is tried out on these particular audiences; and if a lecturer lecturing before these classes and in the presence of three or four delegates, who sit behind him and study his gestures and so on, gets their approval and the approval of the secretary and gets safely through, he is then marked down as a University Extension lecturer and gets very many valuable hints given to him from these experienced persons,—which he generally forgets directly afterwards. But he has to go through this ordeal before he is allowed to be a lecturer.

These lecturers are chosen for many purposes, but the lecturer, once started, is afterwards manipulated by the University Extension secretaries. They come from very many different walks of life. Some of the most successful lecturers have been men, who, after leaving Oxford or Cambridge, have gone up to London and gone into business. We have had lawyers whose practice not coming very rapidly, are often fluent speakers and ready to earn a little money, and to that end go into the business of University Extension lecturing. They have been some of the very best. Young literary men who find high class literature far from lucrative, go into University Extension lecturing. Many young men unable to get their degree or fellowship, will take to University Extension lecturing. Some very few university tutors or professors will do a little Extension lecturing; as a rule, however, only on Saturdays, because they are busy on the other days of the week. A few University Extension lecturers are men who have tried to be dons but have not made a success, and are sometimes successful in making excellent Extension lecturers. There are some who are very bad teachers who are admirable University Extension lecturers; and, *vice versa*, there are some very poor lecturers who are admirable teachers. It is the secretary's business to grade them when selected, and get out a list of their subjects, and then to apportion these lecturers, and have them ready to hand around to the expectant centers.

That brings us to the third point, an examination of the University Extension center. The characteristic point of the University Extension system is the independent growth of these different Extension centers—*independent growth*; there are no two University Extension centers that are exactly alike in England. In every place where there is a University Extension center it has grown up in a different fashion, and one of the chief interests to the University Extension lecturer in England is the different types he meets in lecturing at different centers. I propose to dwell on a few of the typical university centers, and then to generalize a little upon the great variety found amongst them. By far the most interesting centers are those maintained only by workingmen. Perhaps the most interesting of all are those maintained by the great coöperative societies. Some of you may have heard of the extraordinary importance that has been attained in the later years by these coöperative societies. They have for a long time supplied the workingmen who are members with all the goods they need to buy, not only with groceries and every form of food, but with clothes and so on. In many instances they have got together and owned the mills themselves, thus as far as possible excluding the capitalist and middleman. And where a great number of mills are run by workingmen forming coöperative societies they make it a rule to put aside a portion of their profits for educational purposes. The rest of the profits are returned in various ways to the members of the various societies. A certain portion is always spent upon lectures. Until the University Extension took the field they used to have lectures from lyceum bureaus, as they are called in this country. They used to have lecturers who would go down and talk upon particular subjects. The societies soon found it much better to have lecturers from Oxford who would give a course of lectures; and the coöperative societies have gone further than any other group of men in encouraging University Extension, and much money is spent in hiring lecturers from Oxford.

Some of you may have seen a paragraph going round in the newspapers to the effect that a Lancashire mill-hand had just gone to Oxford, having obtained a scholarship there as the result of attending University Extension lectures. That is a perfectly possible condition. A young man, if he read over the course prescribed, would be able to fit himself for college, and he would not be the first actual mill-hand who has found his way to the higher education. It is interesting to know that these groups of workingmen are very particular in the subjects which they like to be lectured upon. They are particularly interested in history and economics. They are not very much interested in courses in literature or in art. In science they prefer applied science to pure science. All the workingmen's audiences are not supplied by coöperative societies; in some centers it is done by employers of labor. There is one who every year gives his mill-hands a present of a course of Oxford University Extension lectures. He sends a check to the University of Oxford, the Educational Extension Bureau, to send a lecturer, and all the employees are expected to attend the lectures. Where there is no single employer of that type a group may sometimes get together and a subscription is made up to obtain the lectures.

Another type of University Extension centers which differs very much from that of the workingmen is the center which is formed in English watering places. It would be difficult to find any American resort for rest and pleasure that exactly compares with the English watering place where people live all the year round; such a place as Malvern, for instance. It is a place largely inhabited by widows and grass-widows of officers and soldiers who stay there because it is healthy and because it is cheap: a paradise for ladies, and a great place for girls' schools; and some of these girls' schools and some of these ladies that have families used to subscribe to get University Extension lectures. It was a very delightful course to give. I had to give it one year, and I know it surprised me until it was

thoroughly explained to me, to find that ninety-nine out of every hundred of my audience were women. The year before I had lectured in Lancashire where ninety-nine out of a hundred were workingmen. At Malvern the Extension center was largely kept up by the family of former officers, such as I have spoken of, and by the big girls' schools which subscribed quite a considerable sum of money, and thus were enabled to give courses of Extension lectures to vary the school curriculum. In other places the University Extension center was worked by ambitious individuals, in connection very often with the church; sometimes they would belong to the Episcopal church, sometimes to other churches. A few ambitious persons would get together and resolve that they would like to have a course of University Extension lectures. The question was how to get the money. Sometimes they begged it, sometimes they gave concerts, sometimes they ran the risk of guarantors and getting money at the doors. It is not safe to take it on that plan. No two centers work in exactly the same way. Certain University Extension centers found that the whole thing depended upon the vigor of one person, sometimes a clergyman, sometimes a lady. In other places the work was carried on by a very well selected committee of public spirited persons, men and women, who worked together and made arrangements in different ways to raise money to get Extension lectures. Every possible combination of these methods and every plan was tried.

Having formed a center, the question was to know how the course of lectures should be brought into touch with the University Extension. A group of persons, say either a group or committee, the Rochdale Society, or whatever it might be, would get together and agree to have an Extension center. They would then have to apply to Oxford to see what it would cost. The Oxford University did not supply Extension lectures for nothing. The University would say, so much, sixty pounds for a cheap lecturer, one hundred pounds for a good one, for a course of ten or twelve lectures.

As soon as a check for that amount was received the University would send down a teacher. The committee would meet, and they would quarrel over what they would want. Two rival centers sometimes exist in one town as the result of strong contention about a course of lectures or subjects. The University doesn't mind, and it would send down two lecturers, one to the east and one to the west part of a little town. The committee having at last settled upon some subject, would write to the University Extension Secretary to assign them a lecturer. It was his business to try to supply them with the right sort of a lecturer. It is often difficult to settle these things. Some lecturers are in demand in some centers on their merits, and in other places the attractiveness of the lecturer was of no importance. The sort of lecturer demanded differed as greatly as the sort of subject demanded. But through skilful handling on the part of Dr. Browne, or Mr. Sadler, or whoever it might be, the matter would be settled and the lecturer would then be notified that he must lecture at such and such a place at such and such times, to such and such an audience. The University Extension center having got its lecturer, it next arranged for the place where the lecturer was to deliver his lecture. It was generally a public hall of some kind which was to be procured, but sometimes it would be a church room in connection with a church; sometimes a theater. The place having been arranged and connection with the lecturer having been made, the next step was entered upon, and the University Extension Secretary sent down a bundle of syllabi. Under the Oxford Extension scheme it was agreed that no course of lectures should be delivered of which an elaborate syllabus had not been prepared. The lecturer must have a syllabus together with a list of books that could be read in connection with it. In some centers the syllabus was distributed, sometimes it was sold, but the lecturer had to deliver the syllabus, which the Extension center would send out. At the end of each lecture the lecturer had to put down a list of books to be

read in connection with it. The center in Mr. Sadler's development of the system loaned the books on these courses. The books referred to were perhaps not easily procured. The University Extension center therefore prepared a list of books and sent them down to be loaned out to the persons who were taking lectures, under whatever system might be advised.

Coming down next to the University Extension center lecturers, they are generally welcomed by the secretary of the center and taken and introduced to the hall in which they are to lecture. The lecturer generally had the advantage in starting of knowing that every member of the audience had a syllabus in his or her possession, so that the lines of the lectures were clearly known. He knew that the books he might refer to were to be procured, because these little Extension libraries, as I have said, accompanied each batch of syllabi, and he, after one or two courses, knew pretty well how to handle his audience. Of course every lecture differs in its circumstances. It requires quite a different treatment to lecture to workingmen and watering place people. The most successful lecturers were those who had the knack of handling the most diverse audiences.

This brings me to the last point to be discussed, and that is the sort of teaching given. Heretofore the purely mechanical way in which lectures are handled has been dealt with. I believe one reason why there are so few women's clubs in England compared to the number in the United States is that the ladies who form such clubs in this country are in England very largely interested in University Extension centers. They take special interest in the work and generally are most efficient organizers of University Extension clubs.

We have the lecturer arrived. He is received generally by the secretary of the center, who delivers him to his audience, and he goes on to lecture. The work that he has to do is two-fold; on the one hand, to his big general audience, to the persons who bought tickets and are coming there and

criticising the lecture because they have paid money, or who have obtained tickets from others, whether wealthy manufacturers, or what not, who have hired the lecturers. All he needs to do is to try to interest them. He has to try to remember that his audience consists partly of persons who have had no opportunity for higher education, partly of persons who from college have gone into business or professions, partly of teachers; and he has to remember that his work is not so much to inform these people as to stimulate them. If he is lecturing on history, he has to remember that various things have been discovered, new ideas worked out since the time these people were interested in higher education, and to try to put them in touch with the newer movements or with the newer development of ideas. To those who never have been to college at all, who have gone straight into business after their school days, it is his business to try to show them what university teaching means. University teaching does not mean the filling up of addled brains with still more things, but showing people how and where to learn things of which they are in need. One's work then is rather to stimulate than to inform. The number of persons living in England who have either never had a university education or to whom that university education, when over, seems to be but mere barren fruit, because they have not been able to build upon the foundation they have laid,—these are the persons who are mainly benefited. The work is stimulative rather than informative. The majority, certainly, of the audiences of the most successful lecturers have been people of this sort: people who do not pretend to work in connection with the lectures but go to listen, and go away perhaps interested,—but they have the next day's daily work to do. The Lancashire mill-hand who has to work a great many hours in the mill wants to be interested and stimulated, but he has no time to continue this work. But, on the other hand, there is ever an inner center in connection with the University Extension audience in England. One may have in a room one hundred people, of whom perhaps

thirty or forty may be desirous of going into the question more minutely. These form what is called a class. When a University Extension lecturer lectures for the first time he asks those who are desirous of forming a class to remain after the lecture. A class may be from fifty to one hundred, or perhaps thirty or thirty-five, perhaps it may not be over a dozen. The lecturer comes down from the platform and discusses with them by question and answer. He recommends them the books to read, and after each lecture asks them what they have been reading since the former lecture. He tries, if possible, to appoint a class-leader; and usually finds one or two people, generally teachers in the schools, who are ready to continue as class-teachers to teach these people for the first time how to read and to assimilate their reading. As a rule teachers are the best people as class-leaders. They have their classes in the evenings to discuss the lecture and get questions ready to ask at the time of the next lecture, to read the books that were recommended, and sometimes to read papers in connection with the course of lectures that has been given. By far the most interesting work connected with this great movement is this work of the classes. The lecturer will meet them and get to know them by personally encouraging them to read. At the end of the time he will give them an examination paper and from the result of that examination will declare worthy of a diploma from the University of Oxford the persons whose attendance has been regular and who have done the work. Sometimes one gets a set of exceedingly good answers. And it is in going over such a set of examination papers that one realizes that the University Extension work does not mean merely the stimulation of a large number but means also the beginning of a real intellectual life for the small number that form the classes. Those persons having passed the examination do not get university credit at Oxford. I do not go into a technical discussion of the question as to whether they ought to get university credit. At any rate, the university authorities do not allow them to

have university credit. Lecturers are always to tell people that their diplomas do not help them to the university credit, but they are to tell them also that they would certainly get more out of their college course for having learned how to do university work in a university way, and that they would find their university work easier for having taken university courses. Oxford and Cambridge very zealously believe that the chief value comes not from learning certain things but from living in an academic atmosphere. University Extension work, then, in England, does not help a person towards a degree; it simply makes his work easier if he wants to go to a university. The obtaining of a certificate is of a certain value to one. To teachers it is of a certain value. A teacher who has taken these diplomas is far more likely to get a place than one who had no experience since her days in the normal school; and the simple fact of having a number of these certificates has been found of real value in certain lines of life.

I do not desire to dwell upon the purely lucrative or non-lucrative question of adopting this work, but rather upon the fact that the people who take these lectures, apart from the general stimulative effect, have recently enriched their lives, and are better able to enjoy current literature, and have a better grasp upon the problems that they have to deal with.

But in one or two other ways University Extension work has its advantages. There has sprung up in recent years, in Oxford and Cambridge, summer meetings. The Oxford summer meeting was instituted by a number of University Extension lecturers acting together, enthusiastic people getting together in the summer who had done good work in the University Extension classes, and might go to Oxford and have a sort of debauch of free lectures; and for a certain sum of money they were allowed to go up to Oxford and stay there and listen to all the University Extension lectures. They are true masters there for the time being. You ought to see the busy Extension secretaries of the local

centers there! They go around and try the new lecturers. You will always find the University Extension secretaries sitting around and taking notes and wondering whether the lecturer will do or not. Many of these people have been helped to go up by the centers themselves, in the way of prizes of free tickets to those who have done the best. The Lancashire millhand who is now a student at Oxford, won this opportunity as a prize from the Rochdale Society as the best student in the courses that had been delivered. These summer meetings are a matter of social interest. A great deal of work is not done, but many acquaintances are formed of different people who are interested in literature and science and art, and they are brought together here, and their interest in such work is deepened and broadened by an actual residence in a university seat and by the study allowed them in the university libraries and the university laboratories.

The Oxford summer meeting is the last seal that has been set to the university movement so far in England. What I have said of Oxford is true likewise in regard to Cambridge. How much further development may be expected is a matter of speculation; whether or not, as has been the case in one place, a University Extension college will become a popular thing. At present there is only one University Extension college where series of University Extension lectures are held; two very wealthy persons, have formed what is known as a university college, and a regular building has been erected in which University Extension lectures are delivered. Whether that sort of thing is going to increase I should think would be doubtful. But at any rate, so far as the history of University Extension in England has up to this time progressed, what it has brought into existence is an exceedingly successful summer meeting; a very keen desire for culture in the minds of many people; a more genuine interest in literature or science or art, or whatever they may desire; and an opportunity for the study in regular university fashion.

My two last remarks will rather be devoted to what University Extension has killed, than anything else. For one thing, Extension courses have utterly killed the old lyceum bureau. No longer do the people desire to have the casual lecturer with his one or two fine lectures going around and delivering one or two lectures and departing by the very next train. No body of people are going to have lectures of that sort when they know they can get regular courses of lectures with an offer to guarantee that the lecturer is reliable and able. Therefore the lecture bureau is dead, and with that is dead a certain amount of scrappiness in higher education in England. There are now the regular University Extension lectures, sometimes two lectures a fortnight for a period of twenty-four weeks, sometimes eight or ten lectures. These lectures are carried with a regular system, presenting certain work and running through the winter, which serves, not as an occasional scrappy titillation of interest, but as a part of their real work. Apart from this, persons who do the real work in the classes with their leaders, while not caring to read the books that are sent on, find themselves kept in line with the real development of the work that is going on in the centers of thought and in the centers of the work.

The second great result of University Extension after the killing of the spasmodic lecturer, has been the bringing together in a social fashion of all the persons interested in any local center in the work of the cultivation of the mind. I said just now, and I believe it is original on my part, that one of the reasons why you do not find so many women's clubs in England as exist in the United States, is largely due to the fact that the sort of people that form a woman's club in this country form a University Extension club in England. I think it is indubitable that the organization of Extension lectures in England, the building up of Extension centers, has afforded a new means of intercourse among persons who might otherwise not have made each other's acquaintance, and who are interested in questions of

literature or art or science. That interest often transcends the interest of denominations; even the ministers of different denominations meet together and deal with these questions of Oxford or Cambridge University Extension centers.

A third point, and that is the last, in which the building up of University Extension has done good in England, is that it has made the people of England much better acquainted with their own universities. Nothing has done more to democratize Oxford and Cambridge than University Extension lectures. Before the University Extension lectures found their way all over England there was a sort of idea that universities existed for the purpose of turning out clergymen and an occasional statesman. The idea that universities could direct them had never before entered the minds of the workingmen. Some of them have stated that they first realized the good the university was when the university was able to furnish them traveling lecturers and the means of instruction. Now, the two great universities in England greatly need that movement of democratization. Had they continued in their past organization Parliament would have been quite likely to interfere with their own means of life. As it is, the two great universities are more strongly entrenched in the hearts of the people of England than ever before.

The enormous advantage conferred by Oxford University Extension in advancing the great class that forms our great university centers is so evident that it is surprising that more centers of the sort do not exist in this country. Neither the Philadelphia Extension Society nor the Extension Department of the University of Chicago seems to fill the exact place that University Extension has filled in England in the last five and twenty years. Perhaps the principal reason is that both the Philadelphia Society and the Chicago University are ready to send out lecturers without demanding anything in return. People most value what they have to pay for. Since University Extension in

England has to contrive and get together to find the means to hire its lecturer, it certainly appreciates him a great deal more than when he was sent down for nothing at all. And in America it will probably be far wiser to have full confidence in the organizing power of the people and to let University Extension come, not as it now sometimes does from a central bureau that sends around asking people, "Are you not looking for lecturers?", offering them lecturers; but from the desire of the people themselves to get acquainted with the modern thought. Then let them know that there is a bureau or center to which they can apply and get what they want, and have a lecturer who is fairly chosen on account of his fitness for that sort of an audience. Surely by such means the University Extension would fill a larger and more important place, certainly when served by men of such fitness for the position as Mr. Sadler and Mr. Acland and others, who spent a great deal of time in trying to fit the right lecturer to the right audience, in trying to discover the thing that people wanted and to get them together. University Extension has been a success in England, and when the time comes, as it undoubtedly must come, when men perceive the fact that it is a good thing to bring the university and the people together,—not in the shape of trying to scatter the university all over the state, or all over the district, but rather in the way of showing the university methods to the people,—and that, if they cannot afford a university course, they can get the sort of persons they want supplied by persons who are experts in finding and supplying such things, then I believe that University Extension lecturing in the United States will kill the lecture bureau in this country, and will supply the means of great educational force for those people who desire to have it, and are so determined to have it that they will find the means to have it and will be ready to pay for having it. The lecturer is worthy of his hire as well as every other form of laborer; and the better type of lecture is not to be secured from the person who, going forth with

confidence that he can make a good impression on an audience, is ready to hold himself up without being guaranteed or backed in any way from behind.

It is with the belief that this study of University Extension work in England might be at least of interest, though I do not set it forth as worthy of imitation, and because I have set off the difference in conditions that exist here and there, that I have detained you this evening.

FOUR PHASES OF KIPLING'S WORK.*

By H. MORSE STEPHENS.

I feel a certain diffidence since the talk I propose to have with you this evening has been announced as a "lecture." I do not propose to lecture, but simply to talk, and to illustrate points of my talk by the reading of poems, most of which I know must be familiar to you, but which may perhaps get a little additional significance by the frankness with which I profess myself intending, not to deal with Rudyard Kipling in any form of elaborate lecture, but rather in a sort of subjective account of how I first became acquainted with the writings of that poet, and of the way in which I have been led to believe others have been impressed by the same characteristics. It is part of the irony of fate that, although I profess to be somewhat of a historical student, and make it more or less my business to talk on historical subjects, the unkind world insists that I shall lecture on a literary subject. I know I am no professor of English literature, and I have not and do not pretend to have the slightest right to speak upon a literary subject; and therefore it is in a double capacity that I feel diffident to-night: first, because I have been announced to "lecture;" and secondly, because I have as my subject one so remote from my field as the literary life and career and work of Rudyard Kipling.

* From a stenographic report of an informal talk before the Art Association of the University of California, at Hearst Hall, August 23, 1900.

In speaking of Mr. Kipling's works to-night I want to clear myself, therefore, of any possibility of being suspected of being a lecturer on English literature. I propose only to try to point out how it is and why it is that Mr. Kipling has especially appealed to me. I believe it to be true that there are thousands and thousands of people in this world who find somewhere in their course through life a particular writer whose thoughts keep them, whose ideas strengthen them. I know of one soldier who, when he goes to the field, always takes in his baggage the Bible and Horace. There are others to whom the cryptic utterances of Robert Browning appeal as being a special help to understanding life better, and to leading it more to their own satisfaction. But I frankly admit that ever since his first appearance on the horizon, it has been the writings of Kipling which have especially appealed to me; and the reasons I can so easily explain that I venture to lay them before you in this study of Kipling's writings.

The first I knew of Mr. Kipling's works was when one of my old school friends employed in the civil service in the Punjab sent me home, copied from the "Civil and Military Gazette" of Lahore, one of those little poems which have since been collected as "Departmental Ditties." It was a pleasure to receive afterwards copies of each of the early poems of Mr. Kipling; and when to his early poems were added his early stories, there came home to me the conviction that there had appeared a man who could explain to the English people, and afterwards, may be, if his genius was great enough, to the world, what the government of India by England meant. To myself, whose family had served in India for four generations, who knew the cost of governing India, who understood in those days the meaning of the "White Man's Burden" as it was borne by those who governed in India, the sudden sounding of this voice explaining to the English people what they had refused to listen to,—the meaning of the government of India, came as a revelation and a source of delight. When

with the next stage of his evolution Mr. Kipling appeared not only as the exponent of the government of India, in prose and verse, to the English people (I think I may say the English-speaking people), when he appeared as the exponent of the British soldier, as the person who saw beneath the somewhat rough and noisy personality of Mr. Thomas Atkins the real work that the red-coated champion was expected to do, a new chord was touched. On one side of my family my people happened to be soldiers; and the story of the soldier, as told in "Soldiers Three," and the song of the soldier—the song, not of the refined, highly polished soldier, but of the real, rough, raw Thomas Atkins—came home with especial delight and pleasure. And when Mr. Kipling evolved from being the exponent of the government of India and the special laureate of the British soldier, into a preacher of political significance—the very particular preacher, on the one hand, of the doctrine of closer union between the people of the English-speaking colonies and the people of the United Kingdom; and the exponent, on the other, of the meaning of the government of dependencies inhabited by alien races—I felt that the political gospel he was preaching was worthy to be listened to. To those who can remember the foundation of the Imperial Federation League in London, and the first attempt made to regard the English-speaking colonies, not as a source of weakness to be sheared off from the mother country as soon as possible, but as a source of strength to be brought into more intimate connection by the labors of statesmen, I felt that this voice of a poet who realized that a closer union must be obtained by a union of sentiment before it could be obtained by a political scheme, was a voice that specially appealed.

And lastly, it seems to me, the fullest development of Kipling in these latter days has been into the preacher of a gospel. It may not be, indeed, a gospel that everybody needed, but it was a gospel that our college youth in England needed sorely. When I was an undergraduate at

Oxford, the great force among the undergraduates was the gospel of the beautiful, the gospel of the aesthetic, the gospel of Algernon Swinburne, Oscar Wilde, and the writers of their class. It was in those days that the comic papers made fun of the undergraduates who strove so hard to live up to the height of their blue china. Those were the days I remember. But when in 1892, after an absence of twelve years from college associations, I went back to teach in Cambridge, I found a new spirit among the men. I found that instead of the study of the beautiful, instead of yearning to lead days of lazy languor, a new spirit was breathed among them, and for the first time the reigning spirit among the undergraduates was a spirit of work, a spirit of discipline, a spirit that life was something hard, and that the harder it was, the better a world it was to face. I found that the leading young men of this generation, instead of having their table littered with the poems of Swinburne, were using as their special gospel to help them, to lead them, the poems and stories of Kipling.

It was in this way that my own personal opinion of Kipling slowly and gradually formed in the four cycles which I have endeavored to describe to you. I would be the last to assert that there are not other sides of Kipling's manifold powers of expression that may deserve as great attention as these four sides to which I have drawn your special attention—his love for the sea, his expression of the yearning of a race for a wandering life, his modernity, his feeling for the romance that underlies our machine-ridden times just as clearly as it did in the days of old.

But I propose to-night to deal with him, first, as an exponent of India to the English people, and to the English-speaking people; secondly, as the very special laureate of the British soldier in all his roughness, and at the same time with his underlying sense of the importance of the work which he is doing; thirdly, with his political gospel, dealing on the one hand with the necessity of bringing into closer bonds of union the English-speaking folk, whether

at home or in the colonies, and, on the other hand, with the duty owed to those alien races which inhabit dependencies which fate has placed under the control of the English crown; and fourthly, I propose to talk somewhat of the more characteristic sides of what I have termed the "gospel" of Kipling, the special message, it seems to me, he has had particularly for youth in these latter days.

Before I undertake, however, the first of the subjects that I propose to take up, one after another, and to illustrate by readings from what seem to me the more characteristic poems, I would draw your attention to the fact that among modern men of letters there has been none since the days of Scott who has shown so much facility in telling his story, in making his influence felt, both in prose and in verse, as Kipling. The extraordinary happiness with which his prose illustrates his verse, and his verse illustrates his prose, deserves, I think, very special notice. In his first poems, the "Departmental Ditties," you will find the same underlying spirit that appears in his first volume of prose stories, "Plain Tales from the Hills." The "Barrack Room Ballads" match the stories of military life in "Soldiers Three." In his more recent stories, as well as in "The Seven Seas," Mr. Kipling dwells upon the two sides of what I have called his "political gospel." Last of all, in the "Jungle Books," those unrivalled allegories which may be used to amuse children, but which contain the deepest of Mr. Kipling's philosophy for grown-up persons, can be found the counterpart of those poems of deeper significance which mark what I have called "the Kipling gospel."

One other reservation I desire to make. I do not intend to speak of Mr. Kipling as an artist. He may be a great artist, or no—it matters not to me. I know that he appeals personally to myself and to thousands of young men. I know that his poetry is helpful, and that is enough. Whether or not his poetry and his prose should be regarded as of the highest artistic excellence, belongs to

those judges of artistic excellence in literature, who will doubtless find his proper place, or else quarrel over what his proper place will be, for a considerable period to come. I, on the other hand, am not so desirous of dealing with Kipling as the man of letters, the artist, as with Kipling, the man, the preacher. The old Romans spoke truth when they spoke of a poet as a "sacred bard," a person who had something to preach; and Mr. Kipling (possibly it may be a source of weakness as an artist, for all I know) is forever preaching. Even in his early poems, but more particularly in his later poems, and in his later prose, he is preaching all the time. He never seems to write a story simply for the sheer delight of writing. He never seems to write a poem simply because some particular form of verse appeals to him, or because he sees a good opportunity for elegant word-twisting. If he cannot find the right word in the English language, he coins a new one, or adopts a word from some of the numerous technical vocabularies which he has mastered—from the language of the Anglo-Indian, of the soldier, of the engineer. In all these matters, the point that should be kept in mind is that Mr. Kipling cares more for what he has to say than for how he says it; and it is with the "what he has to say" that I am mainly concerned. Kipling should be studied as a living force, for that is what he is in England, at any rate, and, I believe, wherever his works may be read.

It should be remembered that in the first stage of his development Mr. Kipling appeared as the exponent of India to the English-speaking people. For such a task he had certain great advantages. Born in India, spending his early years in India, remaining in India, indeed, until very much later than children are generally kept in that tropical clime, he was sent home to England to pass through a somewhat hurried period of school life, and then returned to India as a journalist. To those who know anything of the government of India, it will be understood that the career of a journalist in a bureaucratically governed country

is about as good a one for obtaining information as could possibly be imagined. In India practically all the Europeans are officials or soldiers. The government of India rests with the great bureaucracy known as the Covenanted Civil Service, commonly called the "heaven-born." Assisting these one thousand "heaven-born" in their work are various persons belonging to the Uncovenanted Service, men who serve in the Telegraph Department, in the Police Department, in the Forest Department, in the Educational Department; and Mr. Kipling's father belonged to one of these uncovenanted branches. He was in the educational service, and Mr. Kipling, therefore, had a full opportunity of knowing, through his father and mother, something of the inconvenience of not being "heaven-born." He himself did not even get into this outer ring of the various uncovenanted or assistant services, which held the thousand "heaven-born" in the Government of British India. He came out merely as a journalist. Mr. Kipling, it is true, did not graduate from any college. He graduated, it seems to me, from a college in which more valuable experience may be obtained than in any other, the college of journalism. It was in the rough and tumble work of that college that Mr. Kipling obtained something of that knowledge of human nature, and of human problems, of which he has made use. Attached to the staff of the "Civil and Military Gazette" of Lahore, he began to do the ordinary work of getting out an Anglo-Indian paper, and at intervals he was permitted to publish stories and poems which filled the vacant space not occupied by advertisements. In this way his first chance arrived. As a journalist attached in no way to the Government, people were more free in speaking to the young man, more especially as he was born in India, and was better able to understand their points of view than was the ordinary Englishman. Thus Mr. Kipling was able to get a truer grasp than he otherwise would of the life and thought of the people, in whatever department they might be employed. Not only did the people of

India speak freely, enabling him to make use in his poems and in his stories of especial knowledge of the point of view of the Indian people, but that very shy bird, the English private soldier, would venture to make friends with a young out-at-the-elbows journalist. Private soldiers, who could not speak to their officers on terms of equality, were ready enough to talk to this young man; and thus he had an opportunity of studying Mr. Thomas Atkins. Being sent up as society correspondent to the city of the English Government in India during the hot weather, to Simla, he had an opportunity of studying affairs there. It is difficult to conceive of Kipling as a society correspondent, expected to wait in ante-rooms and make notes of the dresses of the ladies who attended the officers' balls; but that sort of work enabled him to get some knowledge from the outside, and to add to what he had from his father as an uncovenanted servant, of what might be called the bye-ways of official life in India. This knowledge has enabled him in the "Departmental Ditties" and in the "Plain Tales from the Hills" to give a description of the social life of the Indian bureaucrats, which has, to say the least of it, some points that seem deserving of criticism. While in these works Kipling denounces the social shortcomings of the men and women who governed India, yet in those Simla days he was able to understand something of the greatness of the work that was being done in India. In both of these works we see the beginner, the man who is handling his subject for the first time, and since he was still young at that time, he naturally speaks much more sarcastically about his superiors than he would have done had he been older. In the "Departmental Ditties" he is ready to make fun, and does make fun, of persons, of whom, now that in his mature days he understands more of the difficulties of the task of governing India, he speaks with more respect. At any rate, in the "Departmental Ditties" Kipling is mainly making fun of official sinnings; and in the "Plain Tales from the Hills" he is mainly relating tales of flirtation and

similar amusements among the "heaven-born" in their summer homes at Simla. I do not propose to read many of the early poems, or "Departmental Ditties," but merely to allude to them.

We are very slightly changed
From the semi-apes who ranged
India's prehistoric clay;
Whoso drew the longest bow,
Ran his brother down, you know,
As we run men down to-day.

* * * * *

Thus, the artless songs I sing
Do not deal with anything
New or never said before.
As it was in the beginning,
Is to-day official sinning,
And shall be forevermore.

With that introduction Mr. Kipling is able to string together a series of poems, none of them, perhaps, of a very high order of poetry, but with a certain skill in making fun of departments and of officers administrating departments of government. But Mr. Kipling at an early stage perceived that the great difficulty in the government of India by England lay in the fact that England did not know what was going on in India, that the English people were hopelessly ignorant of the problems of the government of India, of the work done in India, of the lives spent in India. Particularly was he aggravated, as all Indian administrators have always been, with the free and easy criticism made by members of the English Parliament, who, going in the cool weather to India, and touring lightly through it, came home and in the House of Commons posed as authorities on Indian questions. These globe-trotters, "G. T's" as they are termed, have always raised the wrath of the official class in India, and Mr. Kipling has impaled one of this sort forever in the poem entitled Pagett, M. P. Pagett, M. P. must always be the type of the visitor in cool weather, ignorant of the difficulties of government in tropical

climate, who, as Mr. Kipling says, "duly misgovern the land." I propose to read the poem because it brings home a second point in the work that Mr. Kipling has done for the Indian administrators. Kipling begins with one of his admirable mottoes, in which he says:

The toad beneath the harrow knows
Exactly where each tooth-point goes.
The butterfly upon the road
Preaches contentment to the toad.

After that Mr. Kipling goes on:

Pagett, M. P., was a liar, and a fluent liar therewith,—
He spoke of the heat of India as the "Asian Solar Myth;"
Came on a four months' visit, to "study the East," in
November,
And I got him to sign an agreement vowing to stay till
September.

* * * * * * *
We reached a hundred and twenty once in the Court at
noon,
(I've mentioned Pagett was portly) Pagett went off in a
swoon.
That was the end of the business; Pagett, the perjured, fled
With a practical, working knowledge of "Solar Myths" in
his head.

* * * * * * *

Mr. Kipling, it will be seen, is not satisfied simply with making fun of the Indian departments. He had as early as the publication of his first volume realized one of the greatest difficulties that the administrators in India have to contend with (and which, for that matter, the administrators in the Philippines will have to contend with in the future), namely, the misrepresentations that are made in regard to India (and will be made with regard to the government of all tropical countries), by persons who pay brief visits and do not understand the conditions. But while in Pagett, M. P., Mr. Kipling makes fun of the travelled "idiots who duly misgovern the land," he realized fully the intensity of sadness involved in serving in India by those

Englishmen whose lives have been sacrificed to the service of India. And in a little poem containing five pictures of the dawn, full day, high noon, gray dusk, and black night, Mr. Kipling has dealt with the conditions besetting the English in India at a time when a national holiday called them together. The poem entitled "Christmas in India" seems to contain more fully the pathos of Indian exile than many a poem or prose story that has been written with the definite intention of drawing attention to the pathos of tropical exile.

High noon behind the tamarisks—the sun is hot above us—
 As at Home the Christmas day is breaking wan.
 They will drink our healths at dinner—those who tell us how
 they love us,
 And forget us till another year be gone!
 Oh the toil that knows no breaking!
 Oh the *Heimweh*, ceaseless, aching!
 Oh the black dividing Sea and alien Plain!
 Youth was cheap—wherefore we sold it,
 Gold was good—we hoped to hold it,
 And to-day we know the fulness of our gain.

* * * * *

Black night behind the tamarisks—the owls begin their chorus—
 As the conches from the temple scream and bray.
 With the fruitless years behind us, and the hopeless years
 before us,
 Let us honor, O my brothers, Christmas Day!
 Call a truce, then, to our labors—
 Let us feast with friends and neighbors,
 And be merry as the custom of our caste;
 For if "faint and forced the laughter,"
 And if sadness follow after,
 We are richer by one mocking Christmas past.

But if the work of governing India has, as I think it may be said to have, its own pathos, the pathos of exile, at least something great is done thereby; and in one of his poems Mr. Kipling brings out something that has been done in India, not by the work of the official government, but by the kindness, wisdom, and insight of one woman. I

remember an Indian civilian telling me that he believed the greatest work the English had done in India was the work started by Lady Dufferin's fund for medical aid to the women of India. He insisted that it was no use to establish good government, no use to establish a good judicial system, no use even to establish that great "Pax Britannica," which prevents the different peoples of India from flying at each other's throats, if the civilization of India was to be regarded as belonging to one sex only, and if the seclusion and ignorance of the women was to be perpetually maintained. It was through missionary endeavor that efforts were first made to bring medical aid to the women of India. But many of the men of India were jealous of the possibility of missionary women having access to the zenanas. Lady Dufferin, wife of the greatest viceroy of modern times, founded a fund for medical aid to the women of India. This aid is given without denominational ends in view, simply to supply women doctors for the women of India. In order that this fund may prosper, it is necessary that it should be placed on a strictly undenominational basis. Some of the medical women in India are Americans, and in one of his prose stories Mr. Kipling has dealt with the peculiar difficulties and dangers that beset the labors of white women endeavoring to help the Indian women in this way. The story called "The Naulakha" is a description of an American girl, who, having passed her examinations, went out to India to serve in one of the hospitals, and the work she tried to do there.

The "Song of the Women," supposed to be addressed to Lady Dufferin by the women of India, begins:

How shall she know the worship we would do her?
The walls are high, and she is very far.
How shall the women's message reach unto her
Above the tumult of the packed bazar?
Free wind of March, against the lattice blowing,
Bear thou our thanks, lest she depart unknowing.

* * * * *

Haste, for our hearts are with thee, take no rest!
Loud-voiced ambassador, from sea to sea
Proclaim the blessing, manifold, confest,
Of those in darkness by her hand set free;
Then very softly to her presence move,
And whisper: "Lady, lo, they know and love!"

But if, in such a poem as that, Mr. Kipling has pictured something of the sort of work that Europeans, and especially European women, may be able to do for India, in the last brief poem of the first volume that I propose to read, he has grasped something of the magnitude of the Indian empire as it stands to-day. The little poem which I include in this portion of my subject is called "The Overland Mail." It contains a picture of the carriage of the mails as they are brought up the Himalayas to the seat of the government at Simla:

In the name of the Empress of India, make way,
O Lords of the Jungle, wherever you roam.
The woods are astir at the close of the day—
We exiles are waiting for letters from Home.
Let the robber retreat—let the tiger turn tail—
In the Name of the Empress, the Overland Mail!

* * * * * * * * *
Is the torrent in spate? He must ford it or swim.
Has the rain wrecked the road? He must climb by the cliff.
Does the tempest cry "Halt?" What are tempests to him?
The Service admits not a "but" or an "if."
While the breath's in his mouth, he must bear without fail,
In the Name of the Empress, the Overland Mail.

The second sphere of Mr. Kipling's work grows naturally from the first. Mr. Kipling first, as I have said, tried to explain what India meant to England and those who govern it. But the power of England in India depended in a very special degree and way upon the strength of the English army in India. The red-coated soldier in England is not a very popular person. It is a national habit to belittle the soldier in favor of the sailor. The sailor is the popular figure in all English life. The private soldier in

time of peace is apt to drink more than is good for him, and when he is drunk he does unpleasant things—breaks windows and smashes things generally. The result is that Thomas Atkins is not a very popular person in England, or was not until Mr. Kipling explained what worked beneath the breast of the soldier. The soldier in time of peace is not a person to be respected, unless you consider the potential value of him in time of war. In India the soldier means a different thing, for the 75,000 white soldiers form the definite basis of the government of those one thousand civilians over those three hundred million people. It is upon the white soldiers, in the last resort, that the force of England rests, and therefore the British soldier in India is a very different creature from the British soldier in England. Mr. Kipling had the advantage of seeing the soldier in India, where, as I have said, he meant empire. He looked beneath the outer crust, and perceived that the two great virtues, which, as I have tried to point out, underlie much of Mr. Kipling's own gospel,—faithfulness to work and obedience to discipline—are the alpha and omega of a soldier's duty. In explaining this, he was able to get into close touch with the soldier, to pardon a certain looseness of speech, and possibly a certain noisiness of manner at times, and always to strike these two main virtues which underlie all this rudeness,—his faithfulness to work and obedience to discipline. In his prose stories Mr. Kipling has dealt with the private soldier in various forms, especially in the stories containing the adventures of the immortal three, Jock Learoyd, Stanley Ortheris, and Terence Mulvaney. In the "Barrack-Room Ballads" he has put into verse some of his ideals of the soldier. These ballads are all of them in Cockney dialect, and it is good Cockney at that. As a rule, dialect writers will slip down now and again, but it is difficult for a Londoner like myself to find many slips in Mr. Kipling's Cockney. The poems I have picked out as illustrating the British soldier best are the "Soldier an' Sailor Too" and a very expressive one to which he gave the

title of "The 'Eathen." In the "Soldier an' Sailor Too" Mr. Kipling sets forth that part of his doctrine which I have called the gospel of work. The poem was written just after the running down of H. M. S. Victoria in the Mediterranean some years ago. When the Victoria was rammed, the story went that the "Jollies," as the Royal Marines were called, fell in on deck and went down without breaking line. That is called the "Birkenhead drill," because at the time of the loss of the transport Birkenhead all the soldiers on board fell in while the women and children were being taken off, and remained in line until the ship went down. That is what they call in the service the "Birkenhead drill," the attention to duty on board ship even when sinking is imminent. The only other thing in this poem which I think needs a word of explanation is the expression "onion guards," which Mr. Kipling makes use of. It is the name the Grenadier Guards go by in London, because they have embroidered on the shoulder a picture of a hand-grenade, which looks much more like an onion than anything else the average Cockney is acquainted with. The language of Thomas Atkins not being very refined, the language of the "Barrack-Room Ballads" is not very refined.

* * * * *

To take your chance in the thick of a rush, with firing all about,
Is nothing so bad when you've cover to 'and, an' leave an' likin' to shout;
But to stand an' be still to the *Birken'ead* drill is a damn tough bullet to chew,
An' they done it, the Jollies—'Er Majesty's Jollies—soldier an' sailor too!
Their work was done when it 'adn't begun; they was younger nor me an' you;
Their choice it was plain between drownin' in 'eaps an' bein' mashed by the screw,
So they stood an' was still to the *Birken'ead* drill, soldier an' sailor too!

* * * * *

The other Barrack-Room Ballad that I propose to take is called "The 'Eathen." It is the history of the growth of a

recruit in the British army up to being a color sergeant. It contains incidentally a good many hints how to be a good color sergeant, which is very much the same as being a good leader of men anywhere.

* * * * *

The young recruit is 'aughty—'e draf's from Gawd knows where;
They bid 'im show 'is stockin's an' lay 'is mattress square;
'E calls it bloomin' nonsense—'e doesn't know no more—
An' then up comes 'is company an' kicks 'em round the floor!

* * * * *

The young recruit is silly—'e thinks o' suicide;
'E's lost 'is gutter-devil; 'e 'asn't got 'is pride;
But day by day they kicks 'im, which 'elps 'im on a bit,
Till 'e finds 'isself one mornin' with a full an' proper kit.

* * * * *

An' last, a Color-Sergeant, as such to be obeyed,
'E leads 'is men at cricket, 'e leads 'em on parade;
They sees 'em quick an' 'andy, uncommon set an' smart,
An' so 'e talks to oficers which 'ave the Core at 'eart.

* * * * *

An' when it comes to marchin' he'll see their socks are right,
An' when it comes to action 'e shows 'em 'ow to sight;
'E knows their ways of thinkin' an' just what's in their mind;
'E feels when they are comin' on an' when they've fell be'ind.

* * * * *

*The 'eathen in 'is blindness bows down to wood an' stone;
'E don't obey no orders unless they is 'is own;
The 'eathen in 'is blindness must end where 'e began,
But the backbone of the Army is the noncommissioned man.*

* * * * *

The third stage into which Mr. Kipling almost inevitably grew from being the exponent of India and the exponent of the British soldier, was due to the fact that he was able to get a wide idea of that rather large force in this world's civilization called the British Empire. This he obtained from two sides. On the one hand, as he had been born in India, he was able to realize what the government of dependencies meant. The poem in which he has most

clearly explained the meaning and aim of the government of dependencies is that long since hackneyed poem "The White Man's Burden." I do not propose to read it, because it has become too painfully hackneyed. I propose, as illustrating that insight which Mr. Kipling has into the meaning of England's government of her dependencies, to read a less-known poem entitled "Kitchener's School." You may remember how Lord Kitchener at last wiped out the disgrace of the death of Gordon; how after twelve years of patient waiting he made the army, made the march, and at last stood in triumph at Khartoum; how Lord Kitchener, having celebrated a great funeral service for Gordon in the presence of the troops, hurried home to London and asked the English people for 150,000 pounds to build a college to be erected in honor of General Gordon at the place where he fell. That was an exhibition of what I have called the spirit of dependential government. Having foughnt his fight, having wiped away the disgrace of the desertion and death of Gordon, Kitchener immediately siezed upon his personal popularity resulting from his victory, to win a sum of money which should enable the dependential government immediately to teach the people of the Soudan how to make the best use of the soil, how to attain to the knowledge which the English have. The poem entitled "Kitchener's School" purports to be a translation of a song written by a Mohammedan schoolmaster when he heard that the Sirdar was collecting money from the English to build a Madrissa for Hubshees—a college for the Soudanese.

Oh Hubshee, carry your shoes in your hand and bow your head on
your breast!

This is the message of Kitchener who did not break you in jest.
It was permitted to him to fulfil the long appointed years,
Reaching the end ordained of old over your dead Emirs.

* * * * *

Knowing that ye are forfeit by battle and have no right to live,
He begs for money to bring you learning—and all the English give.
It is their treasure—it is their pleasure—thus are their hearts inclined.
For Allah created the English mad—the maddest of all mankind!

They do not consider the Meaning of Things; they consult not creed or clan.

Behold they clap the slave on the back and behold he becometh a man!
They terribly carpet the earth with dead, and before their cannon cool,
They walk unarmed by twos and threes to call the living to school.

* * * * *

Certainly also is Kitchener mad. But one sure thing I know—
If he who broke you be minded to teach you, to his Madrissa go!
Go, and carry your shoes in your hand and bow your head on your
breast,
For he who did not slay you in sport he will not teach you in jest.

If, on one side of his political gospel, Mr. Kipling has brought out such poems as "The White Man's Burden" and many prose stories intended to show the duty of a dominant country towards weaker dependencies, he has also grasped the difficult problem presented by the need of bringing into closer political union the various branches of the English-speaking protectorates that are now called the self-governing colonies. The problem that has faced English statesmen ever since the abandonment of the idea of getting rid of protectorates as soon as possible and letting them become independent, has been how to build up a political scheme that would permit of the local independence of Canada, Africa, and the Australian colonies together with a union of representatives of those great English-speaking communities with the central government at home. Mr. Kipling has perceived that difficulty. English statesmen who have never been outside of the mother country cannot see it.

What can they know of England who only England know?

Mr. Kipling had the advantage of travelling and was therefore able to realize the difficulties that must meet all statesmen in forming any scheme of imperial federation. I think he grasps the difficulty and explains it best in a poem called "The Native Born," in which he speaks of the groups of English-speaking people who have sprung up in different parts of the world, and tries to make clear to the English people at home what is the sentiment of these "native born." The poem begins:

We've drunk to the Queen—God bless her!—
We've drunk to our mothers' land;
We've drunk to our English brother
(But he does not understand);
We've drunk to the wide creation,
And the Cross swings low to the morn,
Last toast, and of obligation,
A health to the Native-born!

They change their skies above them,
But not their hearts that roam!
We learned from our wistful mothers
To call old England "home;"
We read of the English sky-lark,
Of the spring in the English lanes,
But we screamed with the painted lories
As we rode on the dusty plains!

They passed with their old-world legends—
Their tales of wrong and dearth—
Our fathers held by purchase,
But we by the right of birth;
Our heart's where they rocked our cradle,
Our love where we spent our toil,
And our faith and our hope and our honor
We pledge to our native soil!

* * * * *

It is such poems as this, showing the essential difficulty of any system of union between the mother country and the colonies that has yet been devised, which make it true, I think, that Kipling is by the grace of God Poet Laureate of Greater England, whatever Alfred Austin may be by the grace of Lord Salisbury.

The other poem that illustrates my point is "The Flowers." Here Mr. Kipling takes colony by colony, gives its essential characteristics, and the difficulty of union. The poem is suggested by a passage in the "Athenæum:" one of those patronizing remarks with regard to colonial literature, which, now that I have been away from England for so long, I can appreciate very much better than I did. In a review of certain poems the writer said: "To our

private taste there is always something a little exotic and artificial in songs which under an English aspect are yet the product of other skies. The very fauna and flora are alien. Nor can we ever believe that the red robin sings as sweetly in April as the English thrush." This suggested to Kipling the poem, "The Flowers."

* * * * *

Buy my English posies!—
 You that scorn the may
 Won't you greet a friend from home
 Half the world away?
 Green against the draggled drift,
 Faint and frail and first—
 Buy my Northern blood-root
 And I'll know where you were nursed!

Robin down the logging-road whistles, "Come to me,"
 Spring has found the maple-grove, the sap is running free;
 All the winds o' Canada call the ploughing-rain.
 Take the flower and turn the hour, and kiss your love again!

* * * * *

Buy my English posies!
 Ye that have your own
 Buy them for a brother's sake,
 Overseas, alone.
 Weed ye trample underfoot
 Floods his heart abrim—
 Bird ye never heeded,
 Oh, she calls his dead to him!

Far and far our homes are set round the Seven Seas.
 Woe for us if we forget, we that hold by these!
 Unto each his mother-beach, bloom and bird and land—
 Masters of the Seven Seas, oh, love and understand!

Before turning to the two little poems with which I propose to illustrate my final point, the Kipling gospel of work and discipline, it occurs to me that I might read a couple of poems in which Mr. Kipling has brought out, I think, something of the meaning of the great struggle which is passing now in South Africa. In the poem in which he commemorated in some twelve lines the death of

General Joubert, Mr. Kipling, I think was the voice that spoke for the English people. Whatever may be the general attitude that history will take with regard to the war in South Africa, one thing is certain, that Mr. Kipling has represented the feeling of the English people in his lines upon General Joubert. The very sincere admiration that breathes from all letters from the front for that great Boer general who fought so gallantly though so unsuccessfully,—every word in English newspapers, from the message sent by the Queen to Mrs. Joubert at the time of General Joubert's death, to the expressions of sympathy in letters of officers and soldiers,—all echo the respect for a gallant foe; and I for one cannot but hope that one of the things that will eventually bring closer together in some common form of government the races that are at present struggling in South Africa, will be the intense admiration felt by gallant foes for each other, in whatever army they may be fighting. Mr. Kipling's words on Joubert are brief but strong:

With those that bred, with those that loosed, the strife
He had no part whose hands were clean of gain;
But, subtle, strong, and stubborn, gave his life
To a lost cause and knew the gift was vain.

Later shall rise a people sane and great,
Forged in strong fires, by equal war made one,
Telling old battles over without hate—
Noblest his name shall pass from sire to son.

He shall not meet the onswEEP of our van
In the doomed city when we close the score;
Yet o'er his grave that holds a man
Our deep-tongued guns shall answer his once more.

And if Mr. Kipling in that poem has expressed his opinion of Joubert, he has in another poem, written in his "Barrack-Room Ballad" style, given the key-note for the admiration felt by the soldiers of the British army for the general who is now leading them in South Africa. The little poem entitled "Bobs" was originally published in

the Pall Mall Magazine, and at the request of General Roberts has never been reprinted. Roberts is a man who does not advertise, and very much disliked this poem written upon him. The poem was written just after Roberts, commonly known as "Bobs," retired from the Indian command, came home, and was made a peer.

There's a little red-faced man
 Which is Bobs,
 Rides the tallest 'orse 'e can—
 Our Bobs.
 If it bucks or kicks or rears,
 'E can sit for twenty years,
 With a smile round both 'is ears—
 Can't yer, Bobs?

* * * *

If you stood 'im on 'is 'ead,
 Father Bobs,
 You could spill a quart of lead
 Outer Bobs.
 'E's been at it thirty years,
 An' amassin' souveneers
 In the way of slugs an' spears—
 Ain't yer, Bobs?

What 'e does not know o' war,
 Gen'ral Bobs,
 You can arst the shop next door—
 Can't they, Bobs?
 Oh, 'e's little, but 'e's wise,
 'E's a terror for 'is size,
 An'—'e—does—not—advertise,
 Do yer, Bobs?

* * * *

Then 'ere's to Bobs Bahadur—little Bobs,
 Bobs, Bobs,
 Pocket-Wellington an' "arder"—
 Fightin' Bobs, Bobs, Bobs!
 This aint no bloomin' ode,
 But you've 'elped the soldier's load,
 An' for benefits bestowed
 Bless yer, Bobs!

There are two brief poems which I wish to read as explaining the last stage of Kipling's development, the gospel of Kipling. It seems to me the two main things that he dwells upon are work and discipline. With regard to work, you will remember he gives a skilful analysis of how work should be done, and must be done, if it is to be any good,—for its own sake. In his novel, "The Light That Failed," I think he gives the best analysis of the modern theory of successful work that I know of. But in his verse he has dealt with the question of work in the celebrated three stanzas which I propose to read. It seems to me that in this poem, and in the last poem that I shall read (the dedication to the "Ballads and Barrack-Room Ballads") he gives us most fully his ideal of man. With that I will conclude the final point of my lecture. The "L'Envoi" to the "Seven Seas" deals mainly with the question of work:

When Earth's last picture is painted, and the tubes are twisted and dried,
When the oldest colors have faded, and the youngest critic has died,
We shall rest, and, faith, we shall need it—lie down for an æon or two,
Till the Master of All Good Workmen shall set us to work anew!

* * * * *

And only the Master shall praise us, and only the Master shall blame;
And no one shall work for money, and no one shall work for fame;
But each for the joy of the working, and each, in his separate star,
Shall draw the Thing as he sees It for the God of Things as They Are!

In that poem I think the gospel of work as one of the wings of the Kipling gospel is best expressed; but most fully of all, perhaps are his ideas as to what a man should do, how he should live, and what are the causes of chiefest praise to men, contained in the half dozen stanzas which he published as a dedication of his "Ballads" to Wolcott Balestier. Mr. Kipling married the sister Wolcott Balestier, and was very fond of that brilliant young American whose life was so early cut short. This poem in spite of certain extravagancies, contains lines which I think serve to bring out what I have called the Kipling gospel.

Beyond the path of the outmost sun, through utter darkness hurled,
Further than ever comet flared or vagrant star-dust swirled,
Sits such as fought and sailed and ruled and loved and made our world.

* * * * *

They take their mirth in the joy of the earth—they dare not grieve for
her pain—
For they know of toil and the end of toil—they know God's Law is
plain;
So they whistle the Devil to make them sport who know that sin is
vain.

* * * * *

To these who are cleansed of base Desire, Sorrow and Lust and
Shame—
Gods, for they knew the heart of Man—men, for they stooped to
Fame—
Borne on the breath that men call Death, my brother's spirit came.

* * * * *

Beyond the loom of the last lone star through open darkness hurled,
Further than rebel comet dared or hiving star-swarm swirled,
Sits he with such as praise our God for that they served his world.

PHI BETA KAPPA ADDRESS.*

By ROBERT J. BURDETTE.

I would leave just one thought with you this afternoon, and that is faith. When the great teacher gathered the people around him, he said "All things are possible to him that believes." Conversely speaking, absolutely nothing in this world is possible to any man or woman, no matter how well equipped, unless he believes. There is no room in this world for doubt; in fact there is no such thing as honest doubt.

All that has been done in this world has been done by men who saw in the dark, by men who believed as the old French minister, "If it is impossible, it shall be done. If it is difficult, it is done already." The world has always been moved by people who, like Columbus, could not see, but who believed.

You say "A cat may look at a king;" yes, but the cat never sees the king. It sees, if it sees anything, only the man. Men look with their eyes, but see with their souls. One man saw the great possibilities of a transatlantic steamship line, but people laughed at him. One learned man wrote a pamphlet against the scheme, proving conclusively that it was absolutely impossible for a steamship ever to cross the ocean. The first voyage the steamer made across the sea, she brought five hundred of these pamphlets

* Delivered at the annual meeting of the society, in the Harmon Gymnasium, May 15, 1900.

as part of her cargo, and people read them and believed every word they contained.

It is necessary to have faith. You must believe in something, and that something is to carry your life on to accomplishment. This is not the most wonderful age the world has ever seen; we are only following in the footsteps of other workers. After Columbus had set an egg on end, the whole world could do it; after the first message had been ticked off on the telegraph wires, the rest was easy. It was the men who could see in the dark, who had faith, who moved the world. It was a boy who laid his ear down to the steel rail and heard the vibrations. He saw the possibilities of a solid wire instead of a hollow tube.

Now, when one goes out into the world to work he does not always do what he planned to do. It is very pleasant to have congenial work, but sometimes God puts a higher estimate upon a man than the man himself does, and says, "Here is something I want you to do that is disagreeable." Now, you can take hold of that disagreeable work, that you don't want to do, and do it splendidly. In fact the best things that have ever been done have been things that men have been compelled to do. Napoleon Bonaparte did not dream of military renown at school. His best biographer tells us that such thoughts were farthest from his mind. He had ambitions to be a journalist; and if he had been a private soldier he would have been shot for desertion, he shirked his duties so. But when he was called upon to take up this disagreeable duty and free France, he did it magnificently. When U. S. Grant received his cadetship in West Point he told his father he believed he wouldn't go. His father said he believed he would,—and Grant went. But the glory of war never had any charm for him. I never saw him with a sword-belt around his waist. He generally had as much use for a sword as a preacher has for a pistol. Grant was a hard man to walk with. He never did have the alert, well-trained step of the soldier; and it was as hard to keep step with him as with a woman.

Every person begins his life with an ideal, and everyone should plan his life as if he were going to live for seventy years. I believe that the angels look upon a man who dies before he is seventy years old with suspicion. They think he must have done something wrong in his life or he would not have died so young. The way to success is to do one thing and to do it well, and to believe that you can do it better than anyone else in the world. You may call it conceit, or egotism, or what you please, but it is the source of power which enables men to do things.

The boys are the ones who lead the world. The boy knows more than his father. If Robert Morse had not known more than his father we would never have had the telegraph; if Fulton had not known more than his father we would have had no steamboats; if Columbus had not known more than his father, we would still be sitting in the swamps waiting for someone to discover us.

A graduate comes out of a great institution like this with plans for great things, but there is more opportunity for doing the commonplace things—the things which we trample under foot. Age after age men looked at the lightning as it zig-zaged across the sky, but they did not know what it was. By and by a man came along and looked at it for a while and concluded to investigate it. People said it would kill him, but he said he was going to try it anyway; and it didn't kill him. He said it was electricity. Another man came along and said, "No, it is a lead pencil," and he wrote a telegram. Another said it was a candle-wick, and he turned night into day; another said it was a speaking tube; another said it was a mule and he hitched it up to a trolley car. I don't know what else it is, but these men all looked into the dark and saw something which only their wonderful faith could reveal to them.

It is not possible for every man to be equipped with all the university can give him; but he has his body, his soul, and that wonderful thing called faith, and what he thinks

he can do, I believe he really can. The only thing is not to lose this confidence.

Sometimes it is better to be defeated than to win a victory. Bunker Hill commemorates a defeat. Thermopylæ was a defeat. Sometimes a team comes back from a distant university carrying more glory in the defeat sustained than in the victory won. It is good for a man to meet with some reverses.

I think one of the grandest spectacles of these closing days was when Andrée stood before the Geographical Society and detailed to them his plans. They were all explorers of considerable fame. Some one asked him what he would do if something happened to his balloon. He turned around and pointed to the different explorers who were sitting in the room and said, "I will come back just as you did when something happened to your ship." God never deserted a man who had such supreme confidence in himself. What difference does it make whether this careass comes back or not? His sublime confidence will come back and be a power among men. It is the men who believe that this world is going on from better to better, and who have no patience with the idea that the world is drifting backward that help to move the world onward. Every year the world is nearing its goal. If you go back to the book, you will find that it was the evening and the morning that was the first day. Always from the night to the dawn, always from the darkness to the light.

Every group of men who have faith in themselves, as they have faith in God, are coming to the light where there will be no darkness. The good, the better, the last and the best. Hoping, believing in men, serving God with heartiness, doing that which the heart and the soul know is the right thing to do.

Now, it does not make any difference what the so-called advantages are, I believe we are born free and equal. I do not care what a man's ancestry was. I don't care who was a man's father. That has nothing to do with it. Every

man stands on a platform by himself. He has body, brain, and soul; and underneath it all is the blessing, faith from God, and how can we keep our hearts from singing when we know that?

At the beginning of things the first command issued into chaos, into darkness, and into night was, "Let there be Light." And we may turn over the pages of the old book until we come to the last page, down to the last word almost, and we read, "There shall be no night."

THE SUMMER SESSION OF 1900.

By THOMAS R. BACON.

For some years the University has offered summer courses during the vacation period. They were first offered by the departments of chemistry and physics. Last year some other departments gave courses, and this year the work has been so far extended as to call for special notice. Thirty-seven courses were offered by eleven departments; thirty-five courses were actually given; there was no call for the courses in advanced Hebrew and advanced Arabic. All these courses were of the grade of college work, except one course in Greek, two courses in Latin, one course in physics, and one in chemistry. The demand for these preparatory courses seemed to be imperative at this time, but the policy of giving courses which ought to be given by the high schools is certainly open to criticism and discussion. The departments concerned in the summer session were philosophy, pedagogy, history and political science, Semitic, Greek, Latin, English, mathematics, physics, chemistry, and botany.

The number of persons engaged in instruction was 22. The total number of students enrolled was 433. There were in addition a large number of persons who had the advantage of instruction as "visitors," and who neither enrolled nor paid fees. This class of persons should be provided for hereafter.

The enrollment according to departments was as follows: Philosophy, 27; pedagogy, 264; history, 230; Semitic, 4; Greek, 11; Latin, 62; English, 148; mathematics, 35; physics, 103; chemistry, 99; botany, 82. Of these 167 took preparatory work, distributed as follows: Greek, 11; Latin, 52; physics, 52; chemistry, 52. Of the total number enrolled (433) 254 tried the examinations; 229 were successful in passing one or more; 179 did not try.

Of the instructors, five were drawn from other institutions; the remainder were from the University of California. I hope that another year it will be possible to secure more teachers from outside, as it is certainly stimulating to our students to thus get in touch with wider spheres of thought and method than it is possible for any one institution to fill.

Of the students registered for the summer session, 52 per cent. were women, a much larger percentage than is shown in the regular sessions of the University. There were 90 college graduates, 35 being graduates of this University. There were 147 undergraduate students, 120 belonging to this University, 22 to Leland Stanford Junior University, and the other three to other institutions. 37 were "apparently preparatory students." The greater part of those who took preparatory work seem to have been students actually in college, who wished to make up deficiencies.

239 of these students were teachers. Of these, 70 were graduates of some college. This is significant, for it shows the value of the policy which the University has long pursued, of encouraging the school teachers of the state to come to the University, if only for a little time, to improve their scholarship. We find that they are anxious to come to one or the other of our universities, and the effect of the encouragement is visible everywhere in the state.

A matter of great local and institutional interest is the geographical distribution of the students. The Recorder's office shows that about 18 per cent. of our students come

from the county of San Francisco; and the incredible percentage from Alameda county is 40. These figures are not only incredible; they are deceptive. How far they are deceptive is easily shown. Only 28 per cent. of the students who have entered the University this year profess to come from Alameda county. This includes all the persons whose families have moved to Berkeley in order to take care of their young people in college, and all the young men who have reached the age of twenty-one, and who are anxious to vote in the national election. As they get more settled, they will declare that their residence is in Berkeley, and thus increase the apparent disproportion between the representatives of Alameda and the other counties.

The records of the summer session show that the percentage from the rural counties is far greater than in the ordinary sessions. San Francisco county, which is ordinarily credited with 18 per cent., had only 15 per cent. Alameda county, which has a record of 40 per cent., sent only 34 per cent. Sonoma county, which has never sent more than 3 per cent. of our students, sent 7 per cent. to the summer session. The geographical distribution of the students of the summer session is not fully worked out, but enough has been done to show that a far larger proportion of the students came from outside the counties of San Francisco and Alameda than come to the ordinary sessions. The number of students attending the summer session who come from other states is too small to call for notice. It is smaller than at the regular semesters.

The University received, in tuition and laboratory fees for the summer session, \$4,330.00. It expended for salaries \$2,700.00. The surplus of \$1,615.00 went to the Library. So, it will be seen, the summer session not only paid its own way, but was able to give substantial financial help to the whole University.

This year the emphasis was laid mainly upon pedagogy and history. It is probable that it will always be necessary

to lay a good deal of emphasis upon the courses in the science of education. From my own experience I should judge that the teachers in the grammar and high schools need to add to their knowledge of the subjects which they are called on to teach, and are pretty good teachers of what they know. But so long as they desire instruction in methods, the department of pedagogy will have to give them what they want. The special emphasis which was laid upon the subject of history need not be repeated at once. The department of history and political science did the best that it could this year. Although it was crippled by the exportation of its two most important members to the Philippine Islands, it was able, with the help of Professor Clyde A. Duniway, of Leland Stanford Junior University, to present a fair list of courses, and to give the courses announced in a satisfactory manner. It is desirable that such emphasis shall be laid, from year to year, upon other lines of study, but I do not see how the department of pedagogy is going to escape from the burden for several years to come; until such time as teachers learn that it is quite as important to know the subject matter of teaching as the methods by which to teach.

There are certain inferences to be drawn from our summer experience, which are of value to those who are interested in the University of California and in education throughout the state. I put forth these inferences as purely personal. They are my own and commit no one but myself.

I. There is need of a summer session. The fact that a good many more than 433 persons came up for instruction in the University shows that the University could not fulfill its function unless it provided for the instruction of these persons. The question whether the state should make provision for college education is still an open one, but the State of California has committed itself in this matter. It has entered upon the policy of giving the highest education that it can afford "without money and

without price." The fact that 239 teachers took instruction in the summer session is evidence that the summer session is needed. The education of teachers for the primary and secondary schools is, perhaps, the most important use of the University, and it can be fulfilled in no better way than by affording opportunities of instruction during the vacation of the schools.

II. A second inference has regard to the suggestion of a "continuous session," after the manner of the University of Chicago. This method involves four terms, of three months each, the purpose being to afford opportunity to teachers to get a term of university work, during the summer vacation, and to allow students who are anxious to do so to graduate after a course that is less than four years. The latter purpose is so bad as not to call for serious discussion. The other purpose is so good that it must be considered. On the whole, the experience of our summer session is not favorable to the idea of a "continuous session." Many of the teachers who came had to come late, because their vacations began later than June 25th, and many of them had to leave before the session closed, because their terms began before August 3rd. The term of the summer session was fixed with special reference to the school vacations, but it was impossible to arrange it so that it would not conflict with the terms of some of the schools. In the East climatic conditions make the summer vacations of the schools nearly synchronous. But the climatic conditions of California almost compel the schools to have their summer vacations at different times. It is possible that the University might compel the schools to come to an agreement in this matter, but it would be a very doubtful kind of experiment, and one upon which I should not care to enter. There is already enough resentment in the schools of the domination of the University.

III. The financial outcome of the summer session seems to me worthy of consideration. A uniform fee of \$10.00 was exacted from all students, beside laboratory fees for

material and breakage in the scientific departments. The total amount thus received, less the salaries, was \$1615.00, which has been devoted, by vote of the Board of Regents, to the very great needs of the Library. The fee was so small that there were few, who could afford to come to college at all, who could not afford to pay it. In the few cases of those who could not afford to pay the fee that came under my notice, private benevolence was ready to step in. As I have heretofore suggested, many persons availed themselves of the advantages of the summer session as "visitors," without paying any fees whatever.

On the whole it may be said that the summer session of 1900 was thoroughly successful. It supplied a real want. At the same time it does not seem to show the possibility of expanding into a regular term of the University under present conditions. In regard to the propriety of having the University do preparatory work, I have a fixed opinion, which may be inferred from what I have said. It may be necessary for the present, but it ought not to be adopted as a permanent policy.

FARMERS' INSTITUTES DURING 1899-1900.

Farmers' Institute work during the fiscal year ending June 30th was prosecuted with very satisfactory results in nearly all parts of the state. It was found necessary to reduce the number, because the funds available for traveling expenses were less, but still by close economy in such expenditures it was possible to hold more than seventy institutes. They were for the most part two-day institutes, but in answer to pressing request one was continued through three days at Santa Barbara and another through four days at Pasadena. The attendance continues large as a rule. It is seldom that less than two hundred attend an institute and an attendance of four hundred is often reached. It is a fair estimate that a total of twenty thousand has been gathered during the year by this branch of University Extension. The sentiment of the people in favor of the increase of the work is very pronounced and resolutions are often adopted calling upon the legislature adequately to provide for Farmers' Institutes by special appropriation as is done in other states. Some institutes are appointing committees to urge the importance of the matter upon legislative candidates and to pursue the subject farther with those who succeed at the coming election. It is likely that the legislators, especially those chosen from the southern part of the state, where institute interest is keenest, will go to Sacramento well informed of the need of liberal provision for an effort which is generally conceded to be accomplishing so much.

The report of the Agricultural College and Experiment Station of the University, which is now being printed by the State Printer, will contain a review of the Farmers' Institute work and its relations to other lines of agricultural teaching and research.

IN MEMORIAM.

HON. ALBERT MILLER.

At a meeting of the Regents held May 15, 1900 the following memorial and resolutions upon the death of Albert Miller, late Regent of the University of California, submitted by Regent Rodgers, on behalf of the Committee, were adopted:

The Committee, to whom was referred the preparation of suitable memorial and resolution concerning our deceased friend, Albert Miller, a Regent of the University of California, respectfully submit the following:

Albert Miller was born February 12, 1828, in the town of Pienia, Hanover, Germany. His ancestors long lived in the town of Müden the north central part of Prusia, and were, from father to son, engaged in the calling of millers, hence the name. During the Thirty Years' War the family was gradually dispossessed of its properties and toward the close of the war the grandfather of the subject of this sketch took up his residence in Pienia about the year 1780.

Albert Miller was educated at the public gymnasia of Brunswick and received about the same intellectual training as that received by a boy in an American High School. After the completion of such an education, he embarked in commercial pursuits, and especially acquired knowledge of the manufacture and sale of fine linens. Thus equipped he arrived in New York on the first Tuesday in November, 1848, where he remained for about a year. He then removed to New Orleans and resided there during the plague of yellow fever in 1849. Subsequently, after a brief residence in Richmond, Virginia, he came to California in the spring of 1851. For a short time he was employed upon the *Bulletin* newspaper and then embarked in the dry-goods business in the service of Hussy, Bond & Hale. In 1856 he became a member of the firm of Jansen, Bond & Company. In this firm he continued with great success in the wholesale dry-goods business until his retirement from active business in 1865, when he made an extensive tour in Europe with his family.

On October 17, 1854, at San Francisco, he married Miss Mary Ann Kendall, the grandniece of Sir Joseph Paxton, architect of the Crystal Palace of London. Of this marriage there are living seven children.

Mr. Miller was at all times deeply interested in educational affairs. He was president for several terms of the Mercantile Library of San

Francisco, and was an officer of the Young Men's Christian Association during the first years of its organization in California.

He was deeply concerned in the reform movement in California in 1856, and was an active member of the Sanitary Commission during the Civil War, and a most liberal monthly subscriber to the funds of this beneficent and patriotic organization.

In 1862 he became one of the incorporators of the San Francisco Savings Union and was the last survivor of the original directors of that institution. He resigned its presidency about two years and a half ago, but continued to be a director of the great bank until his death.

In 1887 he was appointed a Regent of the University of California by Governor Washington Bartlett to fill the unexpired term of J. W. Winans, Esq. At its expiration he was appointed by Governor R. W. Waterman for the full term of sixteen years.

Though in no sense a public man, Mr. Miller was well informed on public affairs. He was a subscriber to the leading journals of the capitals of the great nations of Europe and kept fully in touch with continental polities. His favorite study was political economy, particularly in respect to public revenues and taxation, and in this connection he had accumulated a large amount of data for a work upon this subject which, unfortunately, he never published.

While unostentatiously liberal in his charities and giving freely of his means to benevolent purposes, he was a conservative, prudent, and persistent man of business.

In the early years of California's development he was a very active member of the Republican Party, but of late years took little part in its fortunes. His chief interest, aside from his family to which he was singularly devoted, was centered in the University of California. He was a member of its Finance Committee and devoted much time and attention to its interests, and whatever success has attended the financial affairs of the University, much of it can be truthfully said to be due to the unfailing care and prudence with which Mr. Miller discharged his many and often perplexing duties in connection with them.

He died full of years and honor on April 16, 1900.

This record of a useful and honorable life is of necessity but an epitome of an active career; and it is hereby

Resolved, that the death of Albert Miller has removed from the Regency of the University of California one of its most valued and respected members, whose devotion to its interests has never been excelled and whose memory will forever remain among those who survive him, as an example and inspiration.

Resolved, that this memorial be spread upon the records of the Board and a copy thereof be transmitted by the Secretary of the Board of Regents of the University of California to his family.

HON. A. S. HALLIDIE.

At a meeting of the Regents held July 24, 1900 the following memorial and resolutions upon the death of A. S. Hallidie, late Regent of the University of California, submitted by Regent Slack, on behalf of the Committee, were adopted:

SAN FRANCISCO, July 24, 1900.

To the Honorable Board of Regents of the University of California,

GENTLEMEN:—Your Committee appointed to prepare resolutions in memory of the late Regent Hallidie, submit to your Honorable Board the following:

Andrew Smith Hallidie died in San Francisco on the 24th day of last April. It is appropriate to record in the proceedings of this Board a brief sketch of his well-spent life and of his eminent services to the University and to the public. Mr. Hallidie was of Scotch descent. He was born in London, England, March 16, 1836. He had but little schooling, yet he made himself an accomplished mechanical engineer, and even a learned man. He came to California when he was but seventeen years of age, and first engaged in mining. Being unsuccessful in mining, he turned his attention to the business of engineering, for which he had an inherited inclination. In 1855, when but nineteen years of age, he designed and built a wire suspension flume across the Middle Fork of the American River, for the purpose of conducting water to mines. He became interested in making wire rope, and in 1857 established a manufactory for that purpose in San Francisco. From 1858 to 1868 he designed and built a large number of bridges, principally wire suspension bridges, across several rivers in this State and in British Columbia. He made several inventions for the transmission of power, and for the transportation of freight over canyons and rough surfaces, by means of endless wire ropes. His most important invention was that of the cable railway, which was perfected and first put in practical use in San Francisco in 1873. This invention brought him fame and fortune.

As President of the Mechanics' Institute, Mr. Hallidie attended the first meeting of this Board, as a Regent of the University, on June 9, 1868. Continuously from that time to the date of his death he was a member of this Board, either as President of the Institute, or by virtue of appointment from the Governor of the State. He was a member of the Auditing Committee of the Board from July 15, 1868, until the Auditing Committee and the Finance Committee were consolidated in June, 1874, when he became Chairman of the Finance

Committee, a position which he held until the time of his death. Much of the successful handling of the funds of the University is due to his careful attention to details and to his wise and conservative counsel. During the period between the election and the installation of President Wheeler, Mr. Hallidie acted as President of the University.

Although a conservative man, Mr. Hallidie was always ready to accept new ideas in the educational affairs of the University. He fully understood and appreciated the good in education, and wanted nothing but the best. While interested in all branches of learning, he was particularly interested in manual training, and gave much thought and attention to the organization of the Wilmerding School and to the conduct of the California School of Mechanical Arts, of which latter institution he was a valued trustee. At the request of this Board, he visited the various trades' schools of the country, and selected the principal of the Wilmerding School.

Mr. Hallidie was not a politician, but he always took an active part in municipal affairs, especially in reform movements. He was a member of two boards of freeholders, formed for the purpose of framing a charter for the government of San Francisco.

Every position in his public life he has filled with honor, fidelity, and integrity. In his private life he was devoted to his family and true to his friends.

Be it therefore resolved, that in the death of Andrew Smith Hallidie this Board has lost a wise counselor and the University a faithful servant.

Be it further resolved, that this memorial and these resolutions be spread upon the minutes of this Board.

Respectfully submitted,

I. W. HELLMAN,

CHESTER ROWELL,

CHARLES W. SLACK.

Committee.

Adopted, and the Secretary was directed to send a copy of the above resolutions to the widow of the late Regent Hallidie.

OFFICIAL ACTION.

At a meeting of the Regents held June 12, 1900, on recommendation of the President, the name of the Department of Pedagogy was changed to Department of Education.

At a meeting of the Regents held June 12, 1900, on recommendation of the President, in accordance with the report of the Board of Administrators of the LeConte Fellowship Fund, Miss Alice Robertson and Knight Dunlap were appointed LeConte Fellows for 1900-1901.

Early in August the President received the following letter and a life-sized portrait of Professor Howison, painted by Mrs. Mary Curtis Richardson:

*President Benjamin Ide Wheeler,
University of California, Berkeley, California,*

DEAR SIR:—We beg acceptance at the hands of the Board of Regents of the portrait of Professor George H. Howison which accompanies this letter. It is a gift from the young men and women who have set in Professor Howison's classes from his coming to the University down to the Class of 1899.

You will convey to the Board, as the sense of the donors, that the portrait should be hung in the Library, as the safest and most nearly fire-proof of the buildings; but once the frail wooden structures are replaced by the enduring stone and brick of the Greater University, they trust it may find a permanent place on the walls of the Philosophical Building.

We beg to subscribe ourselves on behalf of the donors,

Very sincerely yours,

J. K. MOFFITT,
ALEX. G. ELLS.

San Francisco, August 8, 1900.

The President reported the gift to the Regents at the meeting of September 12th, and on his recommendation a vote of thanks was extended to the donors.

At a meeting of the Regents, October 9, 1900, President Wheeler reported "I have a great deal of pleasure in

presenting the following communication from Mr. R. C. Daniels, formerly a holder of one of our scholarships:

October 3, 1900.

DEAR SIR:—While a student in the University of California, in the class of '99, I was the recipient of a State of California Scholarship for twelve months, from August 1897 to September 1898, both inclusive.

The money thus received by me, amounting to \$150.00, was of great assistance at the time, but I always regarded it as a loan from the University, not a gift, and being now in a position to repay this loan, I desire to do so.

If agreeable to yourself and the Board of Regents, I would venture to suggest that this sum of \$150.00 might be offered as a special one-year State of California Scholarship, to some worthy student. This, of course, is merely a suggestion, and I desire the money to be entirely at the disposal of the proper authority.

If you will advise me at your convenience of the acceptability of my offer, and of the form in which it may be most conveniently paid over to the proper authority, I shall esteem it a favor. I am

Very truly yours,

RALPH C. DANIELS.

On motion of President Wheeler the money was accepted and the Ralph C. Daniels Scholarship, to be given as other scholarships are awarded, was established. President Wheeler thus conveyed to Mr. Daniels the action of the Regents:

October 10, 1900.

MY DEAR MR. DANIELS:—Your very proper and noble offer as made in your letter of the third instant has been most cordially accepted by the Board of Regents. The Board has voted to constitute for the coming year a special scholarship to be called the Ralph C. Daniels Scholarship. I have been requested, furthermore, by the Board to express to you its thanks and its appreciation of the high motives which actuated you in the gift. Your feeling that the money advanced to you in the form of a scholarship was really a loan and not a gift is entirely the correct one, and I trust that your action will form a precedent for others.

Very sincerely yours,

BENJAMIN IDE WHEELER.

At a meeting of the Graduate Council held September 28, 1900, the regulation requiring of all candidates for the degree of Doctor of Philosophy "a knowledge of Latin equal to that admitting to the College of Letters of this University" was abrogated.

At a meeting of the Academic Council held March 9th, the following report was adopted:

To the Academic Council:

The committee appointed by the Council, on September 8, 1899, to find some more reasonable interpretation of the phrase "most distinguished graduate of each year," for the purpose of suggesting a just and practicable method of awarding the medal, begs leave to state the following:

In 1871 the following communication was made to the Board of Regents, and accepted by them:

"We, the undersigned, desirous of furnishing a stimulus for the development of the best talent in the University, hereby agree to subscribe fifty dollars (\$50.00) each to a fund to be invested, and the proceeds annually applied to the purchase of a gold medal, of suitable design, to be awarded to the most distinguished graduate of each year.

"April, 1871."

"(39 signatures.)

On March 13, 1873, the fund amounted to \$2,383.68; on July 1, 1899, it amounted to \$4,014.34. The annual income from this fund is at present about \$240.00; the cost of the medal has not exceeded the sum of \$125.00 each year, so that the Medal Fund at present increases at the rate of about \$115.00 per annum.

In a communication to the Regents, dated June 13, 1892, (Secretary's Report to the Regents, 1893, p. 75, the University Medal Fund,) President Kellogg reported "that the Academic Council and the Faculties are of the opinion that the bestowal of the medal is not the most desirable means of accomplishing this purpose," *viz.*, "to furnish a stimulus for the development of the best talent in the University."

It is the opinion of the committee that during the years which have elapsed since 1892 the infelicitous conditions of awarding the medal have continued without interruption.

I.

1. The committee assumes that a *distinguished* student of any college of the University is one who approaches as closely as possible to the ideals of scholarship suggested by the courses of study of that college.

2. The committee recommends the following method of determining the *distinguished* students of senior standing for the year:

In colleges with a prescribed course they shall be nominated by the Dean of each college, with and by the advice of the members of the Faculty of such college.

In colleges with group electives they shall be nominated in writing to the Dean of each college by the head of the department in charge of the group elective work of the candidate.

February first of each year, is suggested as the latest date for such nominations.

3. Nominees with a serious delinquency of scholarship or conduct shall not be considered by the Deans as *distinguished* students.

4. If the Deans of the different colleges are able to determine from the list of *distinguished* students the *most distinguished* graduate of the year, they shall recommend such student to the Council as worthy to receive the University medal.

5. If the evidence at the disposal of the Deans of the different colleges does not enable them to designate the *most distinguished* graduate, then such candidates as shall have been agreed upon by the Deans shall be invited to write a competitive dissertation on such subject as the candidate may select from a list of subjects offered by the Deans with the approval of the President.

6. The conditions of such competition shall be arranged by the Deans and approved by the Council.

7. In this competition the final recommendation of the *most distinguished* graduate of the year shall be made by the Deans on the general grounds of originality of treatment, comprehensive view of the subject, and purity of diction, and such other specific requirements as may be suggested by the nature of the theses offered.

II.

1. The list of the *distinguished* students of senior standing shall be reported to the Academic Council for final approval on or before the first meeting of the month of March of every year.

2. It is recommended that the Editorial Committee have such list of the distinguished graduates of the year printed and published in the *REGISTER* of the University.

Respectfully submitted, for the Committee:

J. H. SENGER, *Chairman.*

At a meeting of the Academic Council held May 14, 1900, the following resolutions were adopted:

(1) Any undergraduate who, at the end of any half-year, fails to pass in at least five units of new work, will be dropped from the roll; provided, that any student who for reasons of exceptional urgency is permitted to register for less than five units of new work, will be required to pass in all of the units so registered, or will be dropped from the roll.

(2) A regular or limited student dropped from the roll on account of deficiencies will have an opportunity to reënter after an interval of one half-year; provided that during the interval he makes good by reëxaminations his deficiency in the five units required in 1, as above;

and provided, further, as a condition of further university work, he first remove all matriculation deficiencies.

(3) The regulation, requiring of participants in intercollegiate athletic contests a special standard of scholarship, has been abrogated.

The Schools Committee of the Academic Council has been charged with the question of the revision of the University entrance requirements. The committee has addressed a circular to the heads of the departments at Berkeley, asking for suggestions. Such suggestions, says the circular, "may refer to addition or withdrawal of subjects; introduction of more advanced stages of subjects; and more or less flexible combinations of them in groups." It is not expected that the revision of the requirements can be effected during the current academic year.

New regulations of the Academic Faculties:

The regulation heretofore in force, which required students to pursue French, German, Spanish, or Italian at least two years in order to obtain credit, has been abrogated. Any of these languages may be taken for a single year, provided that the modern language requirement of the curriculum be satisfied.

In scholarship grading the Third Grade will hereafter denote a Pass without qualifications. Grades Four and Five will indicate deficiency (condition and failure respectively), as heretofore.

SCIENTIFIC SOCIETIES.

SCIENCE ASSOCIATION.

In accordance with the policy adopted by the Council of the Science Association, hereafter to publish twice a year an official account of the proceedings of the Association, containing a list and short abstracts of the papers read before the various sections, the Secretary has prepared the following report for the second term of the academic year 1899-1900:

General Meetings.—1. March 21.—Mr. A. W. Whitney. Evolution and the Theory of Probability. An account of the mathematical theory of probability and its application to the problems of variation and heredity.

2. April 10.—Prof. A. C. Lawson. The Wyoming Geological Expedition. An account of a joint expedition of sixty-six geologists from all parts of the United States to the fossil fields of Wyoming. The expedition was very successful, both on account of the specimens obtained and of the knowledge gained of the physical features and the geology of the country.

3. May 2.—Dr. E. J. Wilezynski. Poetry and Mathematics. Published in the UNIVERSITY CHRONICLE, Vol. III, No. 3.

The result of the election of officers for the ensuing year was announced as follows: President, Prof. J. C. Merriam; Secretary-Treasurer, Dr. E. J. Wilezynski.

1.—*Mathematics, Physics, and Astronomy Section.*—Chairman, Prof. G. C. Edwards; vice-chairman, Mr. E. R. Drew; secretary, Dr. E. J. Wilezynski.

February 14.—Dr. W. P. Boynton. The Kinetic Theory of Gases and Liquids. Dr. Boynton discussed critically the fundamental principles of the theory, reviewing both the old and the recent literature of the subject. It seems especially important to emphasize the relation between the kinetic theory of gases, and the more recent kinetic theory of liquids, on the one hand, and the theory of solutions, osmotic pressure, etc., on the other.

April 5.—Dr. E. J. Wilezynski. Lie's Group Theory and Hydrodynamics. An account of the speaker's investigations resting upon the fact that the equations of a one-parameter continuous group can be interpreted as the equations of a steady fluid motion. This paper has since been published in the Transactions of the American Mathematical Society, July, 1900.

2.—*Chemistry Section.*—Chairman, Prof. W. B. Rising; secretary, W. C. Blasdale.

January 24.—Dr. J. C. Meyers. Some Derivatives of Methyl-paraconic Acid. An account of some original work by the author on this subject.

February 7.—W. C. Blasdale. The Color of Organic Compounds as Related to Constitution. A review of the various attempts to connect chemical constitution with color of phenomena.

February 28.—H. C. Bradley. The Color of Salts in Solution. An account of the theory of electrolytic dissociation as applied to the explanation of the color of solutions of salts.

March 21.—W. H. Weslar. The Kinetic Theory of Gases. A discussion of the various theories relating to this subject.

April 18.—L. Eloesser. The Preparation and Uses of Phenacetin. An account of the commercial preparation and uses of this drug.

3.—*Geology and Mineralogy Section.*—Chairman, Dr. W. S. Tangier Smith; secretary, F. C. Calkins.

January 24.—Prof. E. W. Hilgard. The Geology of the Mississippi Embayment. A general review based mainly on Prof. Hilgard's own observations. Prof. Hilgard's writings on the geology of the region are mostly contained in the reports of the State Geological Survey of Alabama.

February 27.—F. C. Calkins. Notes on the Geology of Eastern Oregon. A brief geological sketch of the route travelled by the John Day Expedition under Dr. Merriam in the summer of 1899.

March 27.—Dr. Harold W. Fairbanks. The Geology of Vancouver Island. A general outline of the geology, based largely on the author's own observations. Especial attention was paid to the fiords, evidences of glacial action, and late changes of level. The lecture was illustrated by lantern slides.

April 24.—Prof. A. C. Lawson. The Geology of the Caucasus and the Crimea. A general description of the geological structure and history of the region, which was visited by Prof. Lawson in 1897.

4.—*Botany Section*, conducted as a Botanical Seminary. Chairman, Prof. W. A. Setchell; secretary, Dr. W. J. V. Osterhout.

January 24.—W. C. Blasdale. Dantec's Bio-Chemical Theory of Heredity. The theory seems too vague and crude to be considered serviceable.

February 7.—W. C. Blasdale. Suggestions for a Chemical Theory of Heredity. A discussion of Dantec's theory with an attempt to show to what extent chemical considerations may assist in explaining the phenomena of heredity.

March 28.—Dr. Jacques Loeb, Professor of Physiology in the University of Chicago. Chemical Fertilization. A statement of the most fundamental problems of experimental morphology and the manner of attacking them, together with a detailed account of Prof. Loeb's remarkable discovery that the eggs of Sea Urchins may be made to develop normally, without fertilization, when magnesium chloride is added to the sea-water in definite proportions. An account of this discovery was published in the American Journal of Physiology, Vol. III, page 434.

February 28, March 24, April 11.—Dr. W. J. V. Osterhout. An Epigenetic Theory of Heredity Based on Chemical Considerations. A theory based on simple assumptions, capable of being tested by experiment and adhering closely to the facts is much needed. This theory is an attempt to fulfill these conditions and to explain numerous phenomena hitherto considered contradictory. Its central proposition is that the form of any organ or organism is determined by its chemical composition; this, in turn, depends on a progressive series of chemical changes whose nature is determined partly by the chemical

composition of the egg, partly by the action of external agencies. Each step in the series prepares for and determines the next—subject, however, to the modifying influence of the environment—thus insuring the orderly progress of development. The differentiation of the organism into unlike parts is initiated by the formation of chemically unlike parts or regions in the egg and further developed and controlled by the environment which affects the various portions of the developing organism differently. Resemblance between parents and offspring depends upon similarity in chemical compositions at the moment when development begins and, further, upon similar external conditions during development. Variation is due to dissimilarity in either of these respects or in both of them. Variations due to the environment are inheritable only when they extend to the germ cell from which the new generation springs; this is possible in so far as they are chemical in nature; their effect may be cumulative during several generations and so result in an acquired character of considerable permanence.

May 2.—Miss Minnie Reed and Miss M. A. King. The Rôle of Functional Stimuli in Development. Many characters which are regarded as directly transmitted by the germ plasm or some local portion of it are due to stimuli or pressure from other parts of the organism. They cannot therefore be predetermined in a Weismannian sense. The number of such characters is probably very great. Their existence is an argument in favor of an epigenetic view of development.

5.—*Zoölogy Section*.—Chairman, Prof. H. P. Johnson; secretary, Miss Edna Congdon.

May 20.—Dr. Baneroft. Variation and Fusion in the Botryllidæ. The compound Ascidian *Botryllus* is a very variable genus and many species have been described from the same localities. The question of the validity of these species was tested by raising several lots of colonies from

the same parent. It was found that the variations within a single family were so great that they included three or four described species. Every one of the characters hitherto used for distinguishing the described species was found to vary greatly within the same family, thus rendering it very probable that all the species of *Botryllus* described from Europe and Eastern America belong to a single species. Ordinarily adjacent colonies of *Botryllus* compete very strongly with each other for a substratum to grow on. But colonies derived from pieces of the same colony, some brother and sister colonies, and some colonies of the related genus *Botrylloides*, in which the variation is much less, would not compete with each other when brought into contact but fused completely, forming a common test, common vascular system, and systems containing zooids from both colonies. It is thus seen that whether there is to be competition or fusion depends upon the degree of similarity between the two colonies. The question of the individuality of the colony as a whole was briefly discussed. It was shown to depend mainly upon those characters which cannot well be considered as the result of the summation of the characters of the zooids composing the colony.

CURRENT NOTES.

For the first term of the academic year 1900-1901, the following University Extension Courses are announced:

Two lectures by Professor H. Morse Stephens, The History of University Extension in England; and The History of England's Government of her Asiatic Dependencies.

BOTANY: Six lectures by Dr. Osterhout. The titles of these lectures are as follows: The Problem of Water; The Problem of Light; The Problem of Food; The Problem of Air and Warmth; The Problem of Pollination; The Problem of Seed-Disposal.

ENGLISH: Four lectures by Associate Professor Syle: Ibsen; Rostand; Pinero; Augustus Thomas.

LATIN: Ten lectures on the Eclogues of Virgil, by Dr. Hopkins.

PHILOSOPHY: Ten lectures on the Eighteenth Century Philosophers, by Associate Professor Bakewell. The titles of the lectures are: 1. The Background of Eighteenth Century Philosophy; 2. Voltaire; 3. The English Inheritance; 4. Condillac; Sensational Psychology; 5. Diderot and the Encyclopædia; 6. Helvetius; the Ethics of "Enlightenment;" 7. Holbach and La Mettrie; Materialism; 8. Rousseau and the Emotional Explosion; Romantic Optimism; 9. The Reactionists; 10. Summary of Results; Philosophical Evaluation of the "Enlightenment."

PEDAGOGY: Four lectures by Professor Brown on The Methods of Instruction. The titles are: 1. Instruction as a Social Process; 2. Instruction and the Training to Do; 3. Imitation and the Organization of Knowledge; 4. The Art of Teaching.

ORIENTAL LANGUAGES: A class in Japanese by Mr. Kuno, and a class in Cantonese by Mr. Fong. A course of lectures on The Chinese Problem will be given by Professor Fryer.

Professors Howison, Stringham, and Putzker, and Dr. Lewis have returned to active work in the University after the expiration of their leaves of absence; and the work of the University has been broadened and strengthened by the following new appointments: Alexander McAdie, Honorary Lecturer in Meteorology; H. Morse Stephens, Lecturer in Modern History (for the first half of the year 1900-1901); G. B. Wakeman, Instructor in History; E. M. Blake, Instructor in Mathematics; Leroy Anderson, Instructor in Dairy Husbandry; Anna Fossler, Cataloguer; N. L. Gardner, Assistant in Botany; W. J. Wythe, Instructor in Drawing; W. P. Boynton, Honorary Instructor in Physics; First Lieutenant H. DeH. Waite, U. S. A., Professor of Military Science and Tactics; C. R. Keyes, Instructor in German; A. S. Eakle, Assistant in Mineralogy; Lincoln Hutchinson, Instructor in Economics; C. A. Kofoid, Assistant Professor of Histology and Embryology (after January 1, 1901); F. F. Ellis, Assistant in Zoölogy (till December 31, 1900); W. H. Weslar, H. N. Cooper, and H. C. Bradley, Assistants in Chemistry.

Leaves of absence during the year 1900-1901 have been granted by the Regents to Professors LeConte, Jones, Lange, Plehn, and Cory, and until January 15, 1901, to Librarian Rowell.

